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Case studies book

on

Entrepreneurship and Innovation

&

Business creation and management

**Case studies book
on
Entrepreneurship and Innovation
&
Business creation and management**

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PREFACE

Entrepreneurship and entrepreneurial education are considered two important and determinative issues in the advancement of societies. In reality, both concepts need to be interconnected, as they are the mechanisms for boosting the bet on innovation, creativity, employment and economic growth. Therefore, entrepreneurship education must be encouraged, and true stories of entrepreneurs can be examples to young people.

This book, which is part of the STARTENT project, can be used as a source of examples and materials in the field of education for entrepreneurship in Europe and to foster entrepreneurial interest and talent among young individuals. Case studies included in the five chapters aim to be an innovative and practice-based teaching material on entrepreneurship for higher education, in particular by using real cases and experiential learning. Cases refer to existing companies and particularly to local ones in order to provide students with role models at local level with which they can easily identify themselves.

The case studies relate to different business sectors, and concern different entrepreneurial stages such as start-up, growth and management of a company. In this respect, case studies are selected to address real problems that would-be entrepreneurs or young entrepreneurs will have to tackle with, such as lack of capital, access to markets, opportunity recognition, etc. Particular attention is devoted to display case studies on innovative or technological sectors that can be more easily used in entrepreneurship education.

The STARTENT project – which had its origin in an application to the European Commission, DG Enterprise and Industry (under the call “Entrepreneurial culture of young people and entrepreneurship education”) by a consortium of 10 partners of eight EU Member States, (Belgium, Bulgaria, Cyprus, Italy, Portugal, Romania, Spain and the United Kingdom) – aspires to develop alternative resources for the teaching of entrepreneurship at the higher education level and, simultaneously, develop mechanisms/systems to encourage the entrepreneurial culture of young people in Europe.

With its comprehensive set of actions, the STARTENT project is addressed to young people in general, would-be entrepreneurs, new entrepreneurs and academic and non-academic entrepreneurship educators.

CHAPTER 1. FIRST STEPS

- 1.1. MoveInteractive! (CEIM – BIC Madeira)
- 1.2. Astrotour (FEUL)
- 1.3. The Eszter Hangos cosmetic studio: Finding the right approach to promotion (UEAPME)
- 1.4. A small IT company faces big competition (UEAPME)
- 1.5. A technician decides to open his own business (UEAPME)
- 1.6. The University of Ruse – following the 3GU concept (RUSE)
- 1.7. The beginning is half the battle: The Hive support (NTU)

Case 1.1. Move Interactive - Money is not enough

Sandy Nascimento, CEIM – BIC Madeira

Abstract – Rogério Varela was a teenager when he started to modify videogames and distribute them on the Internet. This ‘hobby’ brought recognition for his skills and he began to be talked about by people in the videogames world. It was just the first step to building a business. Rogério and his brother Roberto, who had management and multimedia knowledge, got together and decided to create a new videogame, called Ugo Volt, and their own business- MoveInteractive.

Keywords – *technology, venture capital, investments, financial support, videogame industry, entrepreneurship*

Background of the firm/Business idea

“My brother [Rogério Varela] is self-taught. When he was 17 years old, he began to modify videogames that already existed in the market and put them on the Internet. Later, his Tomb Raider adaptations were among the world’s top downloads. That’s how we came up with the idea to create Ugo Volt, a videogame about Lisbon in the year 2055, in conditions of global warming,” explains Roberto Varela, MoveInteractive’s CEO.

Roberto and Rogério Varela are two Portuguese brothers with entrepreneur spirit. Because of Rogério’s ideas and skill in modifying existing videogames, by changing the characters and, scenarios, adding new chapters, etc., the two brothers decided to create a new videogame and, therefore, start their own business. So, in 2001 MoveInteractive was created (initially under the name GraficWeb) with the main objective of producing videogames for international markets.

MoveInteractive’s first idea was the production of the game Ugo Volt (also known by its original title ‘Flow – Prospects of Mayhem’) an action/adventure videogame for personal computers and consoles, in which Ugo Volt is the main character.

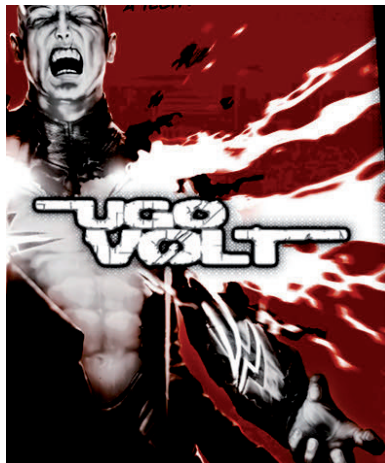


Figure 1– Ugo Volt, the main character of the videogame ‘Flow – Prospects of Mayhem’

In the early days, MoveInteractive had only limited financial resources (Roberto and Rogério had to seek financial help from their family to start the business) and so the business depended on the dedication of its founders.

A year later, MoveInteractive won the Madeira Business Innovation Award, promoted by CEIM/BIC Madeira (Business Innovation Centre Madeira)¹, which gave them the opportunity to open an office in BIC Madeira's incubator and to enjoy a package of services that helped them when things were difficult at the beginning.

The promoters, Roberto and Rogério, also applied for SIPPE-RAM (an EU grant for SMEs managed by the Madeira Regional Government), that was available at that time on Madeira Island and which gave them the possibility to get €142,000.

As the creation of a videogame always demands the usage of the most innovative technology, Roberto and Rogério decided to use this money to acquire new technology, like the 'Gypsy Motion Capture System'. Until then, videogame development was done through algorithms, which made production slower. However, the new system made production faster and more precise, because it allowed real movement to be captured, which enriched the videogame.

So, with this new acquisition, MoveInteractive was ready to produce a demo of their Ugo Volt project. With the increase in work and responsibilities, Roberto realized that he should follow his brother and work full time for the company. So he left his job in a training firm where he had financial security and stability. *"I decided to take this step because with so many things to do for the company [MoveInteractive] it just wasn't sustainable working for others. The decisive factor in this decision was the fact that the partner was my brother with whom I have always had a lot of empathy. I believed in his potential."*

Over the next year the brothers worked hard and, in November 2003, Roberto and Rogério presented the demo at the videogames producers and publishers fair - Game Connection (in Lyon, France). In search of a business opportunity, the brothers met with several publishers at the event. Although their reactions were quite positive they were surprised that the technological platform used to produce the demo was already outdated. However, Ugo Volt was a very ambitious project, with many special features and details, and the publishers remained interested in the product. They asked for a second demo so they could see other features that weren't included in the first one.

The second demo

Ugo Volt had had some success with the publishers. Roberto and Rogério's dream was becoming reality. Now they just needed to produce the second demo asked for at the Lyon fair and show just how good their videogame could be. So, despite their limited financial and human resources, the brothers made an extra effort to produce the second demo.

While the demo was in production, the possibility arose for MoveInteractive to establish a partnership with Dynamedion, a German music and sound effects producer well-known in the videogame industry. Dynamedion decided to support the Ugo Volt demo for no profit, with their services being paid for only if MoveInteractive succeeded in obtaining financial support from a videogame publisher.

When it was complete, the second demo was presented to the publishers who had received the first so well at the fair. But this time, the reaction was different. Although the demo received positive feedback on its production there was criticism of the technological platform used, which was still very outdated. Of course, human and financial limitations meant that the demo had taken a long time to produce so the technological platform used was no longer 'cutting edge'.

¹ CEIM/BIC Madeira (Business Innovation Centre Madeira) – established in 1997, BIC Madeira is an instrument for regional development to support entrepreneurial innovative projects in Madeira Region (Portugal). – www.ceim.pt

So, with no more money to invest in their project, Roberto and Rogério Varela decided that MoveInteractive should look for other work in the multimedia market, which would allow them to make some extra money and keep their dream alive. This was the strategy chosen to save the company.

They created a new multimedia department within MoveInteractive which provided the following services: TV and broadcast, design and 3D animation, motion capture, 3D simulation for real estate projects using animated videos, interactive visits to building projects, environmental awareness videos and corporate videos and promotional campaigns. RTP, the Portuguese public television channel, was among the customers of the company's multimedia services.



Figure 2. Image from the videogame

Where could they get more capital?

In 2005, four years after MoveInteractive was created, the idea was in the open; the demo had been well received by publishers, but feedback on the technological platform had been negative. However, the Varela brothers still had the knowledge, focus and the courage to continue with their dream. Only one little thing was missing: the money!

To create a videogame like Ugo Volt, the company needed much more capital. So, where could MoveInteractive find the money to support their dream?

“We realized immediately that an ordinary bank would not invest in our project, so venture capital was something that attracted me as a manager because that was the way to make the leap and find the money for what was needed,” recalls Roberto.

Venture capital was the solution found to support the production of the Ugo Volt prototype, which would showcase the videogames’s specific features and hopefully attract a publisher. With this financial support the company wouldn't need to spend time doing other work, as they had with the recently established multimedia department. They would be able to invest in and focus on the videogames, particularly the development of the prototype.

Initially, Roberto and Rogério contacted ‘BanifCapital’², who were managing the Madeira Capital Fund (a regional venture capital scheme), but this institution was very slow to respond. From their experience, the brothers knew that technology doesn’t stand still but is permanently changing, so after two months, they decided to approach another institution. *“BanifCapital had already taken two months to respond, so I presented our project in an elevator pitch at the European Venture Capital Congress. I had 5 minutes to present our work to an audience of national and European investors. After the presentation we had several requests for meetings. One was from the Vice-President of InovCapital³. After a week we were contacted and informed that they wanted to support our project. A week later BanifCapital also contacted us to express their interest in supporting us,”*explains Roberto.

This was great news! From having no capital or investor suddenly they had two potential investors at the same time! The brothers wanted to seize this opportunity so they decided to invite both BanifCapital and InovCapital (a national venture capital institution) to support Ugo Volt.

Venture Capital – the right option?

The project was presented to the potential shareholders (the two venture capital institutions) and two project phases were defined. The first one would be the production of the videogame’s prototype and the second phase would be conception and commercialization of the game.

However, it was agreed that the objectives of the first phase - completion of the prototype by December 2006 and its successful presentation to international publishers – would have to be reached before they could move on to the second phase. These two phases demanded two different financial inputs. A total of €595,000 was agreed for the first.



Figure 3. Image from Ugo Volt’s prototype

The company made a trailer for the product to present to the market, including the international press and publishers at the videogame industry’s largest fair, the ‘E3- Electronic Entertainment Expo’ in Los Angeles.⁴ This trailer immediately fulfilled its objectives. It held second position for three days in the Top 10 downloads on GameTrailers.com with over 45,000 downloads made in that period. The feedback was clear; the team’s ability and the videogame’s potential had attracted the attention of the international press, like IGN.com.⁵

² Insitution responsible for Madeira Capital Fund’s management, a regional venture capital scheme - <http://www.ideram.pt/default.asp?zone=madeiracapital>

³ InovCapital is the Portuguese Ministry of the Economy, Innovation and Development venture capital firm, geared towards supporting SME and entrepreneurs. – www.inovcapital.pt

⁴ E3 Expo is the world’s premiere trade show for computer and video games and related products - www.e3expo.com

⁵ IGN Entertainment, a division of News Corporation, is a global leader in three business verticals: media, digital distribution, and game technology. – www.ign.com



Figure 5 –Ugo Volt promotional poster at the E3 – Electronic Entertainment Expo



Figure 6. Image from Ugo Volt prototype posted on IGN.com

The objectives had been met and so the brothers were ready to move forward with the second round of financing. For Roberto and Rogério this meant that they needed to take just one more step and their project would be in the market!

The agreement stated that if the feedback was positive they could proceed. So, Roberto produced a report where he explained all the facts and the success that Ugo Volt had had at the Los Angeles fair. He included newspaper articles (international and national), publishers' emails and feedback from specialists. This report was presented to the shareholders: BanifCapital and InovCapital.



Figure 6. Images from the Ugo Volt prototype presented in Roberto Varela's report

After this presentation, Roberto and Rogério had several meetings with the shareholders to prepare the second round of financial support. At the third meeting it was agreed that the second round of finance would be €2.2 million. This was a fantastic amount and more than enough to proceed with the project.

Two months after the last meeting, and despite all their efforts, MoveInteractive hadn't obtained the official agreement for the second round of financing. The employees' contracts were about to end, so an emergency meeting was scheduled.

To their surprise, Roberto and Rogério were told by the shareholders that they should proceed with the collective dismissal of employees and seek other sources of investment - perhaps, an international publisher. Roberto and Rogério couldn't believe this! MoveInteractive had accomplished all the objectives; the videogame was a success both with international publishers and the international press. So, why was this happening? Roberto and Rogério fought against this, warning of the risks of derailing the project.

Actually, the initial strategy had changed. At that time InovCapital underwent some internal board changes which resulted in the second round of financing for the project being refused. Thus, the 'new' investors forced the brothers to reduce operational costs, which meant reducing the number of employees, 13 at that time. Roberto and Rogério fought against this, warning of the risks of derailing the project and all the work done on the prototype and graphics engine (the result of extensive research carried out by specialized employees, who were the company's main asset). They also realized that because the graphics engine wasn't yet fully developed, dismissing these employees would endanger the whole project. Despite all the warnings, some employees were dismissed and those who resigned were never replaced so the company's operating costs could be kept low. *"We exceeded the expectations of the first round and the international feedback was great! We felt really down about this situation. But we never thought of giving up!"* recalls Roberto.

What now?

They lacked the money to continue MoveInteractive's main project, but Roberto and Rogério didn't want to let the company and the project disappear. So, to avoid bankruptcy the brothers decided to buy the shares held by the venture capital institutions.

In 2007, the company had a basic structure and was facing huge difficulties. So, it was time to try to find other options.

Thus, in addition to the multimedia department's work, MoveIntercative also produced a simple videogame for kids based on a license from SIC, a Portuguese private TV Channel.

At the same time, Roberto and Rogério made several contacts in order to find a new partner to finance the second round of videogame production and succeed in attracting the attention of international publishers again. Unfortunately, the majority felt that the change in the structure of the company had increased its risk and they felt that it would be impossible to complete the project.

In early 2008, the company established an agreement with a videogame representation agency called DDM⁶, which believed in the potential of the business, considering it one of the best projects at the 'Game Connection' held in the French city of Lyon in December 2007. Despite being aware of the company's size and structure DDM agreed to make efforts in order to find a partner to finance the second round. However, after an exhaustive audit at the company's offices, the agency concluded that the small number of employees (seven at that time) presented a big risk for the production process required to develop the videogame. So, another door was closed!

Conclusion

Roberto and Rogério had an ambitious project and true entrepreneurial spirit, but they didn't have the money to make it a reality. Thus, they searched for different ways to do this: an entrepreneurship award, a financial subvention, creation of a multimedia department, partners, investors and venture capital. They thought that the venture capital would solve their problem and that, finally, they would be able to produce the videogame Ugo Volt. But they were wrong, it didn't solve anything. Many videogame publishers were interested in their project, but it just wasn't enough. After 8 years, Ugo Volt never got off the drawing board and MoveInteractive doesn't have sufficient capital to produce the videogame. The technology that was innovative at that time is now outdated and it would require significant investment to buy new equipment and to hire new qualified employees. They would probably need two more years to produce a new prototype and then present it again to the international publishers to remind them of Ugo Volt. It would be difficult!

The project may have failed but the dream remains! As true entrepreneurs, Roberto and Rogério Varela are now involved in a new project, still in the videogame world, called ActuatedCharacter⁷, where the main objective is to create cheap bipedal robots that can run and jump.

Questions

How important is technology for high tech start-ups?

Was money the key to success?

What other options could they consider to develop the project?

Should they keep trying?

What could they have done differently?

⁶ Talent Agency for Video Games and Digital Entertainment – www.ddmagents.com

⁷ Project financed by Eureka / Eurostars. This is a cooperation between IST (Instituto Superior Tecnico University based in Lisbon/Portugal), RoboSavvy (hobby education robotics company based in the UK), NoDNA (hobby education robotics company in Germany) and MoveInteractive (Video Game development company based in Portugal). - <http://actuated.wordpress.com/>

Case 1.2. Astrotour Isla Bonita, S. L.: Innovative tourism on a small island

By **Carlos Fernández Hernández** (*Profesor Asociado Dpto. Economía de las Instituciones, Estadística Económica y Econometría de la Universidad de La Laguna, e-mail: cferher@ull.es*)

Abstract. This case study analyses the setting up of a company providing sky interpretation services and educational/ popular activities connected with astronomy in a small, island tourist destination, which is highly conducive for stargazing. The company's founders had no experience in launching a new business.

The case study will cover the motivations behind this business initiative and study its product range, the identification of the service lines of greatest interest and how it adapted to the changing demand during the economic crisis in order to survive in the market. The case illustrates the start-up of a company in which the skills and abilities of its founders originated from their hobby. It shows a company that is flexible and able to adapt to the market, an important factor for its growth. Other factors that influence the consolidation of this initiative are highlighted and aspects connected with the social orientation of the business are considered.

Finally, the options for future growth are discussed. The target audience for this case study is undergraduate students studying business and marketing.

Key words: *astronomy tourism, entrepreneurship, business model, networking.*

Introduction

The case study has eight sections, including this introduction. The second section focuses on the background of the entrepreneurs, the emergence of the business idea and the context in which it has been developed. The motivation behind the initiative and its strategic focus are described. The setting up of the company and support received are covered in the third section. This includes the competition, the demand, the clients, and the trends and factors that influence the development of the sector. The cooperation and networking strategy followed is highlighted as one of the strengths of the company. The fourth section focuses on an internal analysis of the company, the style of company that is sought and some of the characteristics of the business partners. The fifth section shows the origin and evolution of the company's figures and outlines its future aims. These aims identify the key areas for the future, which will be studied in the sixth section. In addition, the opportunities and competitive advantages will be indicated. The seventh section identifies problems that might affect the growth and efficiency of the company pointing out possible decisions to be taken. The case concludes by outlining the strategic questions facing the business, putting forward alternatives for discussion.

Teaching Notes are attached, which are structured as follows: general perspective, application to courses and audience, noteworthy aspects, suggested teaching techniques, proposed training aims, questions for discussion and references.

Background of the entrepreneurs and the idea

Astrotour is a company that has been in operation for two years. It provides services involving sky interpretation and astronomy education focusing on both tourists and the local population. It is located in La Palma, a small island of 708 km² with a population of 86,000, which is located in the far northwest of the Canary Islands archipelago (Spain). The island has a unique diversity of resources, microclimates and natural and scenic attractions, which have led to it being declared a World Biosphere Reserve by UNESCO. Tourism development is based on a low intensity, disperse model in which rural tourism plays an important role. Juan Antonio

González Hernández, 38 years old, and Carmelo González Rodríguez, 28, are the partners, with equal shares in the company. They have an expert, though not professional, knowledge of astronomy. Juan Antonio has over 20 years of experience providing information and educational programmes on astronomy often in connection with the Astronomy Association of the Island of La Palma. He served as President of this association for four years which shows in his obvious ability in public relations and project management. Carmelo has combined his more recent interest in astronomy with his studies in Business Science. His interests lie in the development of business projects, particularly those aspects related to marketing. He is responsible for the planning, management and promotion of the tourism element of the company.

Their common interest in astronomical observation led to them meeting up at scientific and educational events. After getting to know each other, they built up a personal relationship, in which the idea for a business was marked by two circumstances. The first was “the deep satisfaction that astronomy provides- always leaving you longing for more”; and the second, a joint reflection following a seminar in the summer of 2008, in which ‘astro-tourism’ was put forward as a potential activity on the island; they both felt that with their experience as educators/disseminators they could help realize this potential. This led to a small feasibility study, after which the company was set up at the end of that year.

The island of La Palma has had the Observatorio Astronómico Internacional del Roque de Los Muchachos (ORM) since the 1980s. This observatory is a point of reference in the world of astronomy and a well-known tourist attraction. The feeling among the local population that “astronomy is slightly separated from La Palma society” is in essence what this company is trying to redress. From the beginning, this business idea was linked to an activity about which there is solid knowledge. The idea is also linked to a tourist destination, which because of its advantages for stargazing (high quality skies which are protected from light pollution) has become a scientific reference point for enthusiasts and for a public, which is becoming more interested in the environment. According to the partners, the final spark for the idea came when they realized that there were opportunities that could be exploited and that could generate wealth. Three different types of activity were envisaged for Astrotour: a) bringing astronomical knowledge closer to the society through educational and popular activities, b) making astronomical knowledge accessible to tourists and c) providing technical consultancy on the design and management of projects related to the dissemination of astronomy

This study examines a company that provides specialized services. The setting up of the company did not require large investment, as the services are offered outdoors without the need for its own infrastructure. Materials and equipment related to astronomy (telescopes, projectors, computers and eyepieces) were supplied by the two partners in the company. One of them gave up a secure job as an administrative worker which he had held for 13 years, and the other changed his residence, employment plans and way of life by moving from another island.

This business initiative has, from the beginning, been linked to the quality of the location, in particular the availability of dark night skies for astronomical observation. After reviewing other possible locations the business founders opted for La Palma because “from a technical point of view, the quality of the sky is superior and although a tourist would not know this, this initiative has always gone for quality.” In addition to the characteristics of the territory, there was a strategic perspective; “from the business point of view, developing a business on an outermost island would generate obstacles for the possible entry of competitors who saw an opportunity.”

A basic business plan and, above all, a strategic focus for the project were the management tools used to set it up. During its operational life the initial aims have been reached in terms of the level of recognition of the company, positioning in the local market through the Internet and sales volume. With little to compare with as they are dealing in a new market, it has been *a posteriori*: they have begun to work out a financial plan and budget based on their own experience.

Business setting

The services developed by Astrotour had been considered by others in the area, albeit informally and without establishing a company. To distinguish their product and to avoid overlap with any other existing offer, they did not target the “expert” market – people with advanced knowledge of astronomy - but instead, opted for a market with greater potential: tourists and residents on the island who are looking for leisure and the chance to gain some knowledge of astronomy. However, the uniqueness of the destination and the popularity of astronomy are also attractive for competitors. Attempting to gain a position that would hinder the entry of new competitors has been one of their strategic aims. Another has been to try to attract new market segments. A more global perspective of the market indicates that other companies and destinations, both at national and international level, are beginning to gain recognition, though this is not a threat in the short-term.

The brothers’ limited knowledge of the market, its composition, preferences and potential has meant that they have based their strategy on common sense with some trial and error, and calculated risk-taking. The business setting itself involves strategic uncertainty since it is an emerging sector, in which the consumers do not know the product, and the company does not know exactly what the consumers are looking for. There is also uncertainty related to the fact this novel product could attract new companies and because the local authority may support the entry of new competitors with incentives and subsidies. Thus, two lines of action are vital for the company; first, it should identify the conditions under which the market will develop; then it should protect itself against potential competitors.

This small, island, tourist destination, relatively far from the central European outbound markets, is very dependent on external links (air connections and frequency of flights). Thus the most important market for the proposed activities must be found among those tourists from countries and regions that have direct plane links. The Canarian, mainland Spanish, German, English and Netherlands markets can be distinguished. The potential demand is approximately 20,000 tourists a year within 5 years (ITR, 2010, p. 60) which represents 10% of the current tourism on the Canary Islands. A study of the interest in the sky among tourists on rural holidays revealed that for over 80% ‘stargazing’ is a common leisure activity during a holiday (Fernández Hernández *et al*, 2007, p. 51).

This initiative targets audiences that are clearly differentiated. Popular and educational activities are targeted at the island’s resident population and are contracted by the public sector. The tourist services are aimed at national tourists mainly from Madrid and Barcelona. The main international tourism market is Germany, although the company has not achieved an optimum response, even when services are offered in German. As a result the total number of users are 70% national (local, Canarian and mainland Spanish) and 30% international. The business accepts these proportions, although they recognise the need to increase the volume of international tourists. However, this would mean a general increase in the number of institutional clients (tour operators, travel agencies and accommodation establishments) and the loss of negotiating power with clients. The company has greater power dealing directly with clients with whom they can define the product and fees, but are at a disadvantage when they have to deal with intermediaries.

Certain factors, in particular the need for specialised human resources represent a significant obstacle and have slowed down the growth of the business. The willingness and effort required to work at nights and outdoors, creativity, ability to face challenges, close contact with people, social empathy, innovative and entrepreneurial spirit and knowledge and interest in astronomy are some of the personal characteristics that are required in new staff. The combination of this profile with the ability to speak English and German as well as Spanish, represents a limitation and an obstacle to be overcome.

The main trends in stargazing tourism are described in Table 1, while in Table 2 the factors that influence the development of the sector are presented.

Table 1. Main trends in stargazing tourism

<ul style="list-style-type: none"> • Popularization of astronomy, demand for having knowledge about the sky at the lowest possible cost and growth in ‘stargazing’ tourism • Desire to enjoy the observation of stars by citizens living mainly in urban centres affected by light pollution • Interest in knowledge based on the observation of a ‘real sky’ rather than interpretation based on images or technology • Search for real experiences • Search for higher quality and specialisation in service companies • Selection of destinations and locations for observation based on accessibility, the development of a specific offer, the quality of the sky and other attributes • Greater demand for appropriate infrastructure (accessibility, comfort, etc.)

Source: the author

Table 2. Factors influencing the development of the sector

<ul style="list-style-type: none"> • Development of an image of the destination associated with stargazing tourism • The need for greater familiarity of the users with aspects related with the ‘quality of the experience’- quality of explanations received and the quality of the sky observed • Legislative factors that determine the possibility of placing infrastructure and equipment in ideal observation spots. Regulations that restrict people’s presence in nature reserves • Compatibility of places that present the best sky for scientific observation and therefore the location of installations for tourism and educational uses • The creation of stories attractive enough to catch the attention of an indifferent public • Language skills needed to offer the service to an international market • Offer of alternative programmes (including indoors) for times when it is difficult to observe the sky (adverse weather conditions, full moon, etc.)
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Source: the author

Support received

The presence of the Instituto de Astrofísica de Canarias (IAC), precursor of the ORM, and its commitment to the dissemination of astronomy represents an opportunity for the company. It has operated as a channel for services and has provided logistical and technical support. Other institutions like the Centro de Innovación y Desarrollo

Empresarial Turístico (Centre for Research and Development of Tourism Business) on the island has provided advice on completing applications for subsidies aimed at the design of promotional material for new services. The two partners agree that the support given by the Departamento de Proyectos de la Asociación de Turismo Rural Isla Bonita (Project Department of the Association of Rural Tourism of the Pretty Island) in developing the business strategy, product planning, designing new activities and managing the business itself, has been essential. They admit that their knowledge of the tourism market, and management in general was insufficient for setting up a company. The mentoring provided by the Association, eventually led to Astrotour carrying out vertical integration which resulted in it being much more market oriented.

As a result of this networking, the reach of the company has widened, and the contacts made are key to its participation as an ‘agente dinamizador’ (promoter) in the ‘Mesa Técnica de Astroturismo’ (Technical Group on Astro-tourism) set up by La Palma ‘Cabildo’ (Island Authority) which is responsible for the action plan and implementation of astro-tourism. Through this body initiatives have been channeled and promoted by the company, such as the cooperation (benchmarking) in Astro-tourism established between the Toursim Service of the Region of Coquimbo (Chile) and the creation of a network of astronomical viewpoints with thematic displays and information. Another of the practical results has been to help integration with the Asociación para el Desarrollo Rural de la Isla de La Palma (Association for Rural Development of La Palma), which is responsible for the programme of rural development. This body actively supports innovative activities in rural areas in a number of ways including technical assistance, marketing support and subsidies for projects. These connections led to the launch of an Astro-tourism Training Programme in 2010 which contacts and advises other initiatives and entrepreneurs. The aim is the creation of a ‘Product Club for Stargazing Toursim’ in which Astrotour could participate as a consultancy service.

Obtaining the “Primer Premio Emprendedores regional Fyde-CajaCanarias” (First Prize for Regional Entrepreneurs) 2009, has given Astrotour important recognition, greater visibility and extra attention in the media. The social dimension of the company, fuelled by its many non-profit-making collaborations, is a priority for the partners who want “to be a company that is close to society and one in which society sees something more than just the search for profits.” This reputation will attract new people who are interested, but also generates a potential conflict between the need to make money and the educational and social dimension of the business. The possible resulting tension, which in turn can have consequences for the workload, must be ‘assimilated’ by the company with a high level of dialogue and consensus.

Internal analysis

The two members of the company have highly complementary characters, and this has had an impact on the conception and development of the project. One has a creative talent for generating ideas and innovative products. The other has a great ability for making these ideas take shape and structure and acquire an image. The company’s vision looks for a style “where the partners participate in some way, not as silent partners but as people who identify with the business and take an active part in achieving results.” The partners strive to be pleasant and entertaining yet thorough in their approach to introducing people to the observation of the sky and astronomy, “avoiding over-technical information so that everybody can enjoy talking about the cosmos about which we have always asked questions.”

One of the initial identifying marks of this company has been its decision to stay small, to deal personally and directly with clients and to avoid offering too many different activities. As a result, it has resorted to the short-term external contracting of some specific activities which meet its standards of quality. This has helped Astrotour to develop a network of agents and companies, to implement a division of tasks and to improve specialization.

At the beginning, the company's small size and frantic work rate led to the formalisation of some processes being postponed; though here the main barrier faced has been the unpredicted growth in its educational and popular activities which has resulted in its small staff being overloaded with work.

Origin and evolution of key aspects of the business

The initial financial obstacles to starting an activity of this type are small. Astrotour made an initial investment of €9,774 of share capital, which was used to invest in equipment and astronomy material. An additional €8000 was required during the first financial year. A strategic aim of the two business partners has been to capitalize the company without having to resort to loans. They argue that this has advantages in the current credit market conditions. Though, they may have sacrificed higher returns in favour of maintaining good liquidity, this has been necessary given the delayed payment by public sector clients, who constitute the majority of the company's turnover.

The jobs created in the first financial year (Table 3) have been limited to the posts of the two founding partners. The sale of services initially exceeded expectations and part of the profits have been allocated to the surplus. In 2010 the increase in turnover has not meant an equal increase in profits. This is due, in part, to the incorporation of a new activity, a guide service for educational trips, which has made it necessary to increase the number of staff and to operate with smaller margins.

Table 3. Main financial indicators of the company

Indicators	2009	2010	2011 (target)
Full-time employees	2	3	5
Temporary staff (guides)	-	4	4
Sales (€)	55,000	70,000	100,000
Profit (€)	20,000	10,000	25,000

Source: the author with data based on interviews with the business partners

The idea of providing tourism services was the dominant concept in the initial design of Astrotour's activities. The evidence of the stagnation of the tourism market and the opportunity that the celebration of the International Year of Astronomy represented led to them making popular and educational activities their main focus. For this reason, a department of 'Popular Science and Social Knowledge' was created to design workshops, exhibitions and competitions on the subject of astronomy. In 2010, this line of work was consolidated and expanded and there was reasonable demand for consultancy on developing thematic projects. Eventually this demand created a need for more staff. With regard to the forecasts of the volume of activities, there has been only 20% of the estimated number of tourists and the popular/educational astronomy activities have increased 50 fold. Thus, tourists represent 10% of turnover, popular/educational activities 75% and advice and consultancy 15%. This is exactly the opposite of the initial forecast that estimated 30% from popular science and consultancy and 70% from tourist activities.

The objectives for 2011 are based on consolidating the current lines of activity by increasing tourist and consultancy services. In tourist activities, resources will be focused on enhancing the presence and promotion of current activities ('observations from the mountain' and 'astronomical activities in hotel') as well as designing and placing new products in the market with corresponding promotion. This should give rise to a significant increase in turnover and a recovery in profits for the company, whose target is to reach 25% profit on sales.

For Juan Antonio the keys to success are to be found in “hard work, effort and dedication” and having identified clearly “what is good for the business and not trying to cover everything.” He considers it was also crucial to have had “the combination of support from small businesses, local associations and other local bodies, which helped us to create a very attractive and competitive product. That combination represents the success of Astrotour.”

Key areas for the future

The key challenges to be tackled by the company have been presented in the strategic plan. In Carmelo’s opinion “the main challenge is to consolidate the growth rate, and from a structural point of view, expand the staff and market reach, all this in a setting which gets the best out of the specialization of each person.”

These challenges have not yet been fully thought through, which could lead to the company losing the position it has gained if new competitors arrived on the scene. This is why greater organisational coherence is sought through restructuring of the three departments and greater functional integration; one department for the design and development of projects, another dealing with planning, budgeting and marketing and a third that concentrates on planning activities, logistics and day to day running.

Another immediate challenge is to consider standardising the menu of services adapted to the special characteristics of the clients in a small and select market, which involves creating highly personalized products. Among the new ideas are products that combine nature, landscapes, culture and history with the theme of astronomy. The diversification, specialization and quality of the product range are crucial in strengthening the company’s presence in a territory where there are possible competitors. Maintaining an important share of the tourism market also requires negotiating with agents who are key tourism intermediaries. This would have an effect on the range of services, the flexibility of the company structure and on cost. A strategy of product differentiation would allow greater autonomy with respect to costs.

The expansion of services beyond the island is another area to explore, but it would require service provision in situ and in parallel, through bases in other locations. The experience acquired so far outside the island, both in popular/educational and tourism services, indicates that there is great potential, including the possibility of offering novel products, such as ‘combined trips’.

Table 4. Opportunities and competitive advantages of the initiative

Opportunities	Competitive advantages
<ul style="list-style-type: none"> • Destination, a priori, identified as ideal for observing stars evidenced by the location of the Scientific Observatory of the Roque de los Muchachos • Interest of public bodies (Island Authority, Town Halls, Institute of Astrophysics of the Canary Islands) in the development of projects to popularize astronomy • Appearance of the <i>StarLight</i>⁸ initiative and the <i>StarLight</i>⁹ Reserves 	<ul style="list-style-type: none"> • Small, flexible and versatile structure • Absence of debt and availability of liquidity strengthens position against competitors • Social orientation of the company in line with the demand for education and popularization of astronomy by public institutions and the media

⁸ The international initiative *StarLight* promotes the idea that tourism can become a powerful tool in the development of a new alliance in favor of quality night skies and the development of new tourism products based on the observation of the

<ul style="list-style-type: none"> • Expansion of services to new destinations • Design of services for new market segments • Complementary services, more than just substitutes for other tourism services, flexible and easy to combine • The action plan ‘stargazing tourism’ on the island underway, prior to the creation of elements of the offer and services (providing equipment, signposting, popularization, training, etc.) 	<ul style="list-style-type: none"> • Its image from its location in La Palma as a centre for astronomy can be exploited to expand services in other territories • Very effective use of the Internet and social networks with its own blog and a presence on, Youtube and Facebook • Substantial <i>know-how</i> of the staff in popularizing astronomy and educating people about it
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Source: the author

Problems and specific decisions

The small size of the island is a handicap since it limits the number of people with some training in astronomy who have the right profile to join the staff of the company. The internal training process that is needed and concern about the length of contract have delayed the search for new employees. Decisions on assuming some risk and determining the recruitment processes need to be taken. Among processes that could be implemented are the creation of a pool of candidates, profile selection, offering an introductory course to improve understanding between the person and the company, as well as other specific training in astronomy, interpretation of skies and equipment handling. These could eventually lead to person specifications with a balance between interest and adaptability.

The services involving education and popularizing astronomy, which are financed mainly by public institutions, depend very much on the financial capacity of the customers and their interests and preferences when it comes to initiating projects (workshops, exhibitions, etc.)

- The consolidation of a Project Design and Development Department with a reasonable capacity for innovation should be able to maintain a renewed and constant flow of proposals that could find a ‘buyer’. In parallel, activating the social and educational demand for these types of programmes should help towards the ‘socialization’ of astronomy and ‘making the sky more democratic’.
- There is some criticism that at certain times there has been an excess of work. This is a situation that generates unnecessary tension and leads to decision-making processes that are more individual than collective. This has partly been resolved, according to Carmelo, with the new headquarters and “the creation of a workspace where, whenever we have something to talk about, there is now a place to meet, and of course to deal with anything that is on our minds.”
- Having extra staff available at certain times, flexible structures, better planning of activities and effective time-management can also help greatly.

heavens and nighttime phenomena, which opens up the possibility of cooperation between tourism agents, local communities and scientific institutions. Available at: <http://www.starlight2007.net/pdf/DeclaracionStarlightES.pdf>.

⁹ The *StarLight Reserves* are areas, such as La Palma, in which preservation of natural and cultural resources, conservation of a quality night sky for astronomical observation, nocturnal landscapes or intelligent lighting are used to promote the area as a new tourist attraction. Available at: <http://www.starlight2007.net/pdf/StarlightReserve.pdf>.

Open questions and possible alternatives

The objective of increasing services to the tourist market can be tackled in different ways. Negotiation with tour operators provides the opportunity to promote and sell the services to a large number of clients in the outbound market. Although this strategy could guarantee a definite cash flow in advance, it will require specific negotiation on fees and commissions. One possibility here is splitting the market in two by having one, very standardised product placed in the market through a system of intermediaries with an additional component from another product occasionally added on with a relative low return for the company. Another one would be for the company to provide a service with a high degree of personalization which adds value to the tourist experience and provides a more favourable return for the company. A third alternative, again as a mixed model, consists of doing without the intermediaries and establishing a network of relationships and agreements with accommodation providers to present and/or provide services in their establishments. A large part of the tourism market could be reached, generating added value for the accommodation providers and guaranteeing the company's brand and reputation as a service provider. Furthermore, the tourists reached could also be interested in other more specialised services of the company.

Yet another alternative is to capture clients directly through the company's own marketing tools and using all means at their disposal (social networks, etc.) This would require a booking and confirmation system.

The social/educational side of the company has been emphasized as demand from the tourist segment has weakened. This situation, which is also the result of adaptation to market conditions due to the crisis, has led to the partners having differing visions depending on their respective backgrounds. The possible alternatives appear to be: the adoption of an 'aseptic' business profile; the projection of the company as an agent providing services subcontracted by public institutions; or a mixed model based on a network of agents and collaborators to maximize market presence.

The feared appearance on the island of a competing company capitalized by the personal work of its members has led to an unusual search for alternatives and strategies to face up to it. Among the main alternatives is to conserve the central core of a reduced company, growing by the minimum number of staff possible and subcontracting other services or integrating investors in strategic extras which allow it to respond to any demand for more sophisticated products. Other alternatives are the specialization of services for particular niches and segments of the market, which would guarantee a minimum threshold of profitability, and vertical integration with other companies specializing in tourism services among the network of agents that operate in the destination.

Case 1.2. TEACHING NOTES

Overview

Astrotour, located on the Spanish Island of La Palma (Canary Islands), is a company that promotes activities involving the observation and interpretation of daytime and night-time skies for residents and tourists through educational/popular astronomy programmes and tourism services.

Carmelo González, a young entrepreneur with a business background and Juan Antonio González, a veteran and enterprising astronomy enthusiast, are the owners. They have successfully launched the idea, taking a business risk in a completely new sector. They have been able to adjust their original priorities and actions to the new conditions of the economic crisis. After two years in business, at the end of 2010, the business partners have observed how providing activities which popularize astronomy, educate people and make it part of their tourist experience has become an attractive business idea. They have their “eyes open” for competition and they feel the need to restructure their company by growing in size and widening their service range to secure new clients. They are aware of the need to define a strategy for the future which includes: a balance between the two main areas of activity (educational/popular astronomy and tourism services), identification of services with the greatest growth potential, design of products that are adapted to the demand profiles, expansion into new markets, introduction of a policy for profitable pricing, selection of professional profiles suitable for the working team, appropriate selection of intermediary tourism companies and the definition of a marketing and communications strategy to reach the target groups.

The main objective of the case study is to help students achieve a greater understanding of the challenges that a small business must face to consolidate itself. The study focuses on strategies such as limiting financial dependence, establishing a portfolio of flexible services, strengthening relationships with collaborators and preparing for the possible arrival of competitors. As well as these points, students’ attention should be drawn to the entrepreneurial opportunities that hobby activities, such as astronomy, can represent.

Intended courses and target audience(s):

This case study could work well with groups of undergraduate students studying entrepreneurship and marketing, particularly those who wish to start their own business and need to develop a business model and networking strategies.

Highlights of the story

- An interest/hobby of the business founders becomes a business opportunity.
- Being part of an emerging sector can lead to uncertainty that needs to be managed.
- Alternatives for growth and the dilemma of how to relate to clients.

Suggested Teaching Techniques:

The case study material is made available to students prior to the class to be read as homework. The class proceeds as follows:

- Present the profile of the entrepreneurs and their motivation.
- Discuss the opportunity for setting up the business based on a new tourism resource and a new segment of demand in the context of an economic crisis.
- Highlight the main strategic aspects that have influenced the decision-making during the company’s life.
- Students complete a SWOT analysis of Astrotour’s situation. (This could be done out of class).
- Students present their SWOT analyses.
- Students prepare a business model focused on increasing the tourism services of Astrotour and on consolidating the business (maximum 200 words). This work could be done out of class.
- Students present their business models.

Teaching/Training Objectives:

As a result of the case study students should be able to:

- Identify those characteristics of the business partners that represent successful entrepreneurial styles.
- Improve their understanding of all the factors involved in the success of a small business operating in a small tourist destination with a very unique offer.
- Complete a SWOT analysis of Astrotour's situation.
- Discuss the pros and cons of the coexistence of the two main service areas: education/popular activities and tourism services.
- Propose a business model oriented towards increasing the tourism services of Astrotour and consolidating the company's business.

Suggested questions for discussion,

- a) *Is it profitable for a company to be a pioneer in a market or does it carry more risks than advantages?* This question involves reflection on the character of the innovative business person willing to take risks in a business setting marked by uncertainty.
- b) *What are the main reasons for the entrepreneurial success of Astrotour?* There are various reasons for the success of this initiative. This question tries to recognize the professional and personal abilities that the business founders have employed and to identify the external aspects that have been most influential.
- c) *What was the departmental model initially adopted by Astrotour and how does it differ from the final model? Up to what point should the company specialise exclusively in one or other of the two service areas?* The main aim is to show that the company has had to adapt as a result of the changes in the market. The discussion is about the degree to which the services offered by the company are substitutive, or whether keeping them all could lead to a loss of competitive advantage.
- d) *Do you consider that the presence of an International Astronomical Observatory on the island is an essential asset for this new tourism product?* This question aims to centre the discussion on some intangibles that contribute to the identification and differentiation of the tourist destination as one for stargazing
- e) *Explain the main strengths and weaknesses of an island destination for the development of stargazing tourism. What would be your estimate of the attractiveness of this emerging segment of tourism?* The students should read carefully to identify the conditions, interpret the case and assess the attraction and then present a consistent argument.
- f) *Given the company's characteristics and the conditions of its setting, which of the three options for growth put forward seem the most appropriate?* The main idea is to change from an analytical exercise to one which confronts them with making a decision that requires them to weigh up the benefits and drawbacks of each option. Furthermore, it should provoke reflection on potential conflicts of values: i.e. maintaining the company's distinguishing features and preserving a small and flexible business structure or seeking profitability.

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Case 1.3. The Eszter Hangos cosmetic studio: Finding the right approach to promotion

Timea Czirner,

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In 2008, Eszter Hangos, aged 25, graduated from the vocational school where she had studied cosmetics. This education was very useful because it not only gave her the relevant theoretical knowledge, but also two years practical experience of providing cosmetic treatment, first for members of her family and later on for real customers. Her dream was to be a cosmetician and to have a nice workplace. However, at the time of the economic downturn it was particularly hard to find a job in this field.

She tried to use all of her connections to get a job but without success. After four months of active job searching, she took an important decision: to set up her own business. She had all the qualifications and experience she needed. This gave her the confidence to start and the courage to get a loan from the bank with which to start her business.

Although she was extremely good in her field, she did not have any management or basic business studies behind her, only the support of her family and friends.

She visited several businesses and learned about the cost of renting a small cosmetician's room in a beauty salon. She decided to rent a tiny place in the city centre. It was very cosy and the price was reasonable compared to the places she had visited before. She had to pay her part of the overhead costs and a fixed amount for renting the cosmetic tools.

In the beauty salon there were two hairdressers and one manicurist. This was an advantage for her because it attracted customers. Some of them went to get a haircut and then decided to have their make-up done afterwards.

In the market there were several small beauty parlours offering differing quality of products and degrees of professionalism. In a small town like Pécs, word-of-mouth is the most common form of advertising. Good beauticians can quickly become very popular if they do a good job, can handle customers well and offer services at a reasonable price.

Most customers are price-sensitive. When Eszter was considering the price-range she should offer, she studied the market and tried to find out the average price for the different services. She decided to offer high quality products and chose a high price range. She was aware of the efficiency of word-of-mouth advertising, so she did not print any flyers or leaflets to promote her business.

However, this was not the main problem. The real difficulty was that she set the prices of her services too high in times of crisis. Fewer and fewer people were looking for high-quality, highly priced cosmetic services and as she did no marketing for the business, she did not attract as many customers as she had imagined.

Her costs were high as she had to buy all her beauty products, hire the equipment and decorate the place she was renting. As all the products had a maximum 1-2 years shelf-life, she had to buy them again and again. She also had to pay the bills for electricity, heating and the rest of the overheads. All in all, it was very hard for her to meet these costs while she was receiving almost no income.

“I was not convinced that with lower prices more customers would come to my place. I decided on a marketing strategy that would attract the high-income customers. Also, the problem was that most of my customers were my friends at that time and I was not willing to ask them to pay. Sometimes I even let the friends of my friends go free.” - says Eszter, looking back.

Three of her good friends were studying management, marketing and business studies. They told her that the first step to attract customers is to set up a marketing plan. So they worked together to find a proper strategy in order to raise awareness. This included the creation of groups on social sites, advertising through leaflets and spreading Eszter’s business cards.

No one had ever taught her how to write an appropriate advertising slogan or how to find the best ways to attract customers. So she had to learn all of these and she relied on her friends’ knowledge of marketing.

“They suggested that I should decrease the price of my services but I was concerned about the lower profit margin. If I’d lowered my prices, I would not be able to pay any of my bills.

The marketing of my company went well. Several advertisements were posted on social sites (Facebook and its Hungarian alternative, called IWTW). The target group were people registered on beauty services websites, wellness hotels and other local websites,” explains Eszter.

“She did not believe that we could improve her business. And we still believed that if she did not decrease her prices, even an aggressive marketing strategy would not help to attract customers. She had some new customers but she did not even manage to earn 20% of her expenditure.” – comments Mariann, a friend of Eszter. *“It was just not right to see her running this high-quality service business with very good skills but not being aware of how to carry out appropriate marketing,”* she adds.

Days went by and more and more new customers showed up as a result of the advertisements posted. However, turnover did not improve significantly. Eszter’s friends pointed out several times that the reason for this could be the high prices and the lack of any special discounts or offers. Also, not far from Eszter’s cosmetics studio, there was a very low-priced service where cosmetician students were doing their internships.

As her friends explained to Eszter, there are basically three approaches young entrepreneurs can take in setting their prices: 1) using competitors’ prices as a benchmark, 2) determining the desired profit per item by looking at the cost of making their products or delivering their services, or 3) considering both the competitors’ prices and cost per item (i.e. a combination of 1 and 2).

Eszter decided to reconsider at least some of her prices. Eszter and her friends chose the third option to set her prices similar to those of her competitors but taking into account the profit margin she wanted to achieve. The competitors’ prices were on average 12% cheaper than the prices she had been offering. She decided to lower her prices slightly while still offering high quality services and products.

“We tried to introduce a monthly discount in order to attract more customers. Each month there were four or five services that were 10% cheaper than normal. Women were particularly keen on having a face massage or nice makeup before weddings or other special events. Also waxing was very popular especially in the summertime. The discounts worked. More and more customers were coming to my place and they told their friends about the discounts and the quality service,” comments Eszter.

The turnover was increasing. Her turnover grew from about €100 per month to €260 and she managed to pay almost all of her bills from her income. However, she was still not making a profit.

More and more beauticians were opening businesses in the same street so the competition became very intense. Consequently, the supply of these services increased, while the demand did not. Most customers wanted to go to the hairdresser or to have a manicure but only some of them decided to have cosmetic treatment.

After a while Eszter asked her friends again for advice. Since the market was too full and the hairdressers did not have enough customers, they decided that they would do something together to attract more customers. They had two ideas. The first idea was to introduce a loyalty card that entitled the customer to some free treatment (within a certain price range) after the tenth visit.

The other idea was to give a discount card for the other services offered within the studio. For example, if customers went to the hairdresser, they would get a card that entitled them to a discount on the price of the cosmetic or manicure service.

This new system needed to be promoted. *“We had to decide how we would implement it. Close collaboration among the staff was necessary. Most of the discounts offered were between 5% and 20%, depending on the service. All of the cards had the name of the card holder and they were valid for one year,”* Eszter recalls.

“We asked a graphic designer to design the promotional card. It included only basic information such as the address of the beauty centre, the name of the card holder, the discount category, validity date and a nice background picture. It was printed on paper similar to that used for business cards. Also as part of the promotion we bought 4kg of small chocolates. It was a small investment for all of us and we really hoped that it would work. Basically it cost each of us the equivalent of two weeks’ rent. This was the only cost that we had to share,” adds Brigitta, the hairdresser.

They did not promote the new scheme through leaflets or in newspapers, but relied on the Internet. Everybody posted an advert on their social sites (including Eszter’s group that she had created at the beginning). In addition, they created a group for promoting their overall services and discounts.

“We informed every single customer about our new concept and gave them a small chocolate next to the card. I think the atmosphere is very important for customers. I know many service providers who are not that nice with their customers and their business is not going so well. People come here to relax and to leave their stress behind for a short while. The environment and attitude of the staff are crucial,” comments Eszter.

It was not surprising that with time more and more people came in and of course everybody was welcome. Slowly, the monthly turnover increased to €500 and the cosmetic studio became more and more popular, particularly among young people. Also the 40-50 age group formed a significant part of the clientele. These customers mostly requested anti wrinkle face massages and waxing while among younger customers (mostly students) acne treatment was the most popular.

“It is working and I am very happy we had this idea. Several beauticians started to do similar promotions but they were not that successful. I wish I had had these ideas earlier and not only in the third year of operation. I think it is necessary for an entrepreneur to know how to do marketing and how to manage a business. Now I am attending evening classes related to business, focusing on how to be a good manager,” says Eszter concluding the interview.

It is still difficult for a small company to start up a business in a constantly changing environment. In the case study, two main problems can be highlighted: the lack of appropriate pricing and the absence of a marketing strategy at the beginning of the business activity. How deep should market analysis be? Can one carry out such analysis without a business education and rely only on common sense?

What are the best ways to promote a small beautician’s salon? Could Eszter promote her services in a better way with the same budget?

Case 1.4. A small IT company faces big competition

Timea Czirner,

European Association of Craft, Small and Medium-Sized Enterprises UEAPME

Zsolt was 18 years old and a very energetic person.. In 2000, after graduating from a secondary school in Budapest, he decided to apply for a customs administration programme in his school that lasted for an additional year. Fortunately he was accepted on the course and he was eager to learn more about this area.

However, after the extra year, he was not motivated enough to work in this field. He had had two semesters of management courses during his vocational training and had turned out to be very good in this subject. As he was motivated, he read many books about how to be a good manager and became excited by the idea of having his own company. The only problem was that he had no real idea in which field he should be involved. Also, he was looking for a business partner who was skilled in a specific field which could be profitable.

In 2001, a friend of Zsolt introduced him to Péter, who was just finishing his IT studies at the University of Pécs. Peter had excellent skills and knowledge of programming, developing, designing and managing websites. He was also very young at only 21 years of age.

After graduating from University, Péter decided to join Zsolt and set up their own IT company.

Zsolt had a large social network of web- and graphic-designers, journalists and students from different art schools. He knew that it was not easy for them to start careers as freelancers or to be self-employed. They were very skilled and some of them had good jobs but most wanted flexible working hours and to have their own business.

Zsolt studied the market for IT services and he found out that there are not many companies specialising in website development. It was a niche market at that time and consequently there was a great opportunity to enter and make a profit before competitors arrived.

The two of them had only a small amount of money to invest but they had the tools they needed; basically two computers, a room to work in and a fixed phone.

After they learned about how to register the company they asked a friend to be the company's accountant. Finally, in December 2001, they founded their own business.

Its first base was in Kaposvár, a small city in South-West Hungary. Péter lived there and had a small flat that they could use as an office. They decided to name the company 'PageForU' which referred to the main activity of the company. In order to get into the business, the first step was to come up with a marketing plan. Neither of them had previously studied how to create a proper marketing plan. They read about it in several books and articles and finally the two young entrepreneurs managed to prepare a one-year marketing plan which included a definition of the target audience, detailed action plans, different scenarios and a maximum and average budget plan for all the activities.

The plan involved mostly offline marketing tools such as leaflets, small posters and spreading business cards.

The company mainly targeted freelancers and self-employed people who might be interested in promoting their portfolios online. The price was fixed. Since they did not face stiff competition at that time, they could ask for a high price for their services.

“We went to universities and left our leaflets there as well as in art studios. In a short period, many people contacted us. Also word-of-mouth advertising was helpful. Peter was extremely busy with the technical part and me with the financial and customer side,” explains Zsolt.

“Our business became very popular. It was an easy way to earn money. And most of the new customers came because we were recommended by a previous client. However, more and more companies showed up on the market. The competition was increasing every day. They were not as popular as us but still it was time to think about some additional services that we could include in our portfolio,” adds Peter.

In 2004, the two young entrepreneurs came up with new services to offer. One of them was to provide assistance to people who had accidentally erased hard drives and needed to retrieve all or some of the lost information.

Another new service was website hosting and maintenance. The focus changed from providing a one-off service to a continued involvement with the customers.

The company grew bigger and bigger. Zsolt and Peter decided to move the business to a better office where they could welcome the customers. Zsolt found a very comfortable office in the heart of Kaposvár. It was in a modern building, furnished for two people and with a meeting room shared with five other small enterprises. The price was reasonable and it included the basic furniture.

“We managed to create a small business on our own and this was a great feeling. We were very young and already had our own company which was profitable. A good idea, a bit of luck and big motivation were the key factors that helped us to create all this,” says Zsolt.

However, the competition was growing. Plenty of small companies were set up in 2003-2004 and offered their services for similar or cheaper prices. For Zsolt and Péter it was clear that in the long-term they had to lower their prices in order to survive in the market. However, Zsolt knew that PageForU already had a good reputation and even with the same prices the regular customers would not choose another service provider.

Online advertising had become more and more popular since the company was established. There were customers from all over Hungary and both of the founders were extremely busy running the business.

“It gave us a lot of experience. We had to be aware of the legal, financial and market-related issues, like the new upcoming trends. We had plenty of different tasks and it gave us confidence that we could handle them,” says Zsolt.

“However, competition grew rapidly and we had to charge less and less for our services. We were really concerned that eventually we might have to close the business because it could be unprofitable,” adds Peter.

“We had the competitive advantage of having been established well before the others and our circle of customers was loyal. Designing websites added up to almost 60% of the turnover, the rest was mostly website maintenance.

After 5-6 years of running the business we had very good references and all was going well. But after so many years of operation we did not have the same spirit as before. It was more like a fight to stay in the market. And the competition was extremely intense. Maybe with an aggressive marketing strategy we could have planned for a longer time period. But we wanted to try something new and the future did not look as bright as in the beginning,” comments Zsolt.

The problem was mostly with the marketing of the company. In the beginning the target group were freelancers and other artists who wanted to sell their products or services. But with time the marketing plan relied more and

more on word-of-mouth advertising and with the competition they faced, this was not enough. Also other companies offered the same services for much lower prices.

“We were making less and less profit compared to when we started. Of course we could have continued to operate the business this way as we had many customers, but from 2006 so many small IT companies emerged that we lost control. We had to lower prices. Péter was often stressed and he wanted to hire a full-time employee to help him with the technical part of the work. Finally we hired a girl, Szonja, who had excellent skills in programming and was about to finish her studies at the University of Budapest,” explains Zsolt.

She joined the team in 2007 and turned out to be an excellent colleague. While Péter and Szonja were fully busy with the websites, Zsolt hired an external consultant to research the market. The results of this showed that they were still in the high price range in the market. But as taxes, such as flat-rate healthcare contribution, self-employment tax, as well as the overhead costs were very high, they did not want to lower their prices. In addition, more and more ‘do it yourself’ software emerged with which users could create and manage their own websites.

“We had a real management crisis when we were discussing the options. Zsolt wanted to expand our operation abroad. My idea was to have a more aggressive marketing strategy. Teamwork is very important especially if you are the only two managing the company. For us the main problem was that we could not agree on what to do. Our business was still profitable and we had many clients but we both knew we couldn’t continue like this,” says Péter.

After some months of looking for solutions and researching the market, Zsolt decided to quit the business and look for a change.

He was not motivated enough to control this business with its income fluctuating from month to month. There were too many competitors in the market and it was hard to make the same profit as back in 2002-2004.

Zsolt left the company in early 2009 and decided to study again. He applied to medical school as he wanted to be a dentist. He does not regret his decision. As he says: “For the profit we were making at the end or which we could have made in the future, it was too much stress for me. I don’t regret starting the business as I now have a lot of experience behind me. I would even consider starting another business in the future. But the market was full of competitors and we could not really find the right position for ourselves. It was the best decision to leave”.

Péter continued running the business on his own –with the help of Szonja - and later a bigger business in the market offered a very high price to take over the company.

Péter hesitated for a while but at the end he decided to sell his business and work for the new company as it had many highly skilled IT-technicians and the management was reliable. He has a good salary and he works only part-time, with flexible working hours and in a less stressful environment.

In conclusion, Péter comments: *“All in all it was worth having our own business. We were lucky and we tried to gain as much as we could out of it. It is important to know when to finish and we did it well.”*

Entering a rapidly growing market where there is little competition is always very attractive and full of challenges. There is high demand for the service and the company makes good profits until the competitors arrive. But when this happens, how can the company maintain its profit rate? By adopting a more aggressive marketing strategy? By lowering prices? By expanding? By having a reliable brand name? Which is the most important of all these?

Case 1.5. A technician decides to open his own business

Timea Czirner,

European Association of Craft, Small and Medium-Sized Enterprises UEAPME

Since his childhood Ferenc has been crazy about cars and is always reading books about different types of vehicles. His father, József was a car mechanic. After Ferenc finished primary school he often helped József and wanted to follow the same profession as his father. During his time at secondary school, in the evenings and weekends, he helped fix cars at a friend's garage. In this way he gained some experience and earned a bit of extra money.

After finishing secondary school, Ferenc started to work in a car repair shop in Debrecen, Hungary. Ferenc liked his job and he was a very reliable, quick and ambitious employee.

After two years, in 2001, when Ferenc was 21 years old, he got a job at 'Egres Klima' (meaning Gooseberry Air-conditioning Services), a company which installed and maintained air-conditioners. It was a small company with 12 employees, established in 1999 and with a turnover of €86,000 in 2001.

When he started working at Egres Klima, he was attending vocational training courses specializing in air-conditioning technology. All these classes were paid for by the company.

After three years, he was awarded employee of the year and after a while he was promoted to interim boss. He had a very nice office and a good salary but he felt that he was the only one with much technical experience. He continually had to help his colleagues and sometimes was working day and night in order to finish the work.

Egres Klima was managed by two people. There were frequent disputes between them and in many cases they could not agree on important decisions. Ferenc felt that he was always in the middle and he grew tired of the stressful atmosphere. He also noticed that except for two or three of them most of the workers were not motivated and they could not solve many of the technical problems that occurred. At that time, he began thinking of starting his own business but did not have the courage to leave his job and start something risky.

There were 4 or 5 other players in the market, all of them small companies. Air conditioners were becoming popular but most people could not afford them.

Having observed the market for a year he knew that the potential competitors (including the company he was working for) would not pose a big threat for him, so he decided to start his own business.

At the same time Ferenc began secret discussions with three or four of his colleagues about them joining him. After a while, they all confirmed that they would work with him. In 2005 they left Egres Klima and founded a new organisation called 'Tölgyfa Klima' (meaning Oak Air-conditioning Services). It was financed by a loan from the bank. In order to secure the loan, Ferenc had to take out a mortgage on his house.

A small office building was rented on the outskirts of Debrecen with a meeting room and a small kitchen as well as a big warehouse to store the machines and tools. At the beginning there were only seven employees but then a good friend of Ferenc with management experience agreed to join him as manager of Tölgyfa Klima.

Two secretaries were also hired. One was given the role of informing customers about the technical advantages of each product (customer relations) and the other person was responsible for the financial side of the business. Three technicians were part of the team as well.

Tölgyfa Klíma only targeted businesses as customers. Most of Egres Klíma's business customers who already knew Ferenc and his professional background moved their contracts to Tölgyfa Klíma. These were mostly big businesses. The services Tölgyfa Klíma offered were mainly connected to ventilation technology and specialized tasks, such as assembly, full interior construction, repair and installation of car air-conditioners and refrigeration systems.

After installing these machines, Tölgyfa Klíma offered a maintenance service. The company had long-term contracts with many multinational enterprises and was responsible for the air conditioning and heating systems of most of the Hungarian subsidiaries of these big businesses.

With time, there was also an increasing amount of work in Budapest, where most of the international companies had their headquarters. Tölgyfa Klíma was expanding. In 2008 the company had long-term contracts with 18 different international enterprises and a turnover of €150,000. As the work increased, additional staff were hired. Some of these were self-employed or subcontracted but most of them were full-time employees. Within five years 10 technicians had been hired in order to manage the workload. Also there were always one or two students working for the company on six-month contracts.

The problems began at the end of 2008 when the economic crisis started to have an effect on businesses. With the exception of one multinational company, all of the business partners of Tölgyfa Klíma had financial problems. As the maintenance of the air conditioning system was not their biggest concern, they did not pay the bills or could only pay in part. Because these businesses made up most of Tölgyfa Klíma's customers the company was very dependent on them.

There were also problems with management. The manager of Tölgyfa Klíma left the company for personal reasons. Since Ferenc did not yet have the right skills to lead the company and was also busy with the technical work, they had to find somebody with good management skills as soon as possible. This was not easy. The previous manager was a good friend of Ferenc and so he was able to trust him completely. Ferenc decided to wait and take his time choosing the right candidate to replace him.

Time was passing and even though he held many interviews there was no ideal applicant.

"Our customers could not pay their bills and neither could we. We had no cash-flow. I thought it was the end. I had to fire two or three persons and make contracts for payment in instalments with our biggest business partners. It was very stressful and we had to live on a day-to-day basis.

Some of the smaller business customers went bankrupt so even though they owed us a lot of money, they could not pay the whole sum. We had to record it as an irrecoverable debt in the accounts. More and more of these appeared in the books and the only advantage of not having profit was to pay less tax," explains Ferenc.

Tölgyfa Klíma had to work out how to solve this cash-flow problem. The only feasible solution was to open their services to private customers in order to expand the customer base. However, the problem with private customers was that even though they were many, the company could not obtain as much profit as with business customers. The private services covered such as things as repairing air conditioning systems in vehicles, installing air conditioners in apartments etc.

The turnover was not as high as in previous years. In 2008 and 2009 the business was making a loss and had to ask for extensions on the incoming invoices. There were many promises from the customers' side to pay. However, most of them did not and some of them are still pending.

Tölgyfa Klíma continued to work for the multinational companies even without pre-financing. This was Ferenc's decision.

"Once we thought we would have to close the company. But then in a couple of days one invoice was paid by a big customer and so we could pay some of ours. The cash flow was fluctuating wildly," says Ferenc.

"The only thing we could do was to wait until the crisis passed by," adds one of the workers.

Meanwhile Ferenc was contacted by Péter, one of his friends who was a manager at a big company. He had the relevant background, with six or seven years of experience in managing a medium-sized company, and was looking for a job. Ferenc was very interested so he interviewed him and in the middle of 2009 Péter was hired as Tölgyfa Klíma's new manager..

"He was a very good manager. Many Excel sheets and new software tools were introduced. It was like a revolution in our system. As a person he was very friendly and knew how to be nice but also strict as our boss. It took a lot of work to change the administration system but it was crucial to do it," says Maria, the secretary.

For example before Tölgyfa Klíma introduced Excel sheets, data had to be inputted in three or four different files. Nobody recognised that with a link it could be more efficient and less time consuming to input data. Also the tasks and timetable of the technicians were written on paper and put in a table. Papers were often mixed up and left there even if the task had been accomplished. The old system was confusing for everybody. Péter changed this scheme to an online calendar which showed the planned tasks for each person for each day. It was updated by the staff whenever a job was finished or delayed.

Péter was very committed to Tölgyfa Klíma and Ferenc was satisfied with him. Péter tried to balance the risk by keeping only the most reliable business partners and including more private customers. Ferenc learned a lot of good practice from the new manager.

Suddenly, at the beginning of 2010, Péter decided to leave Tölgyfa Klíma because he received a very attractive job offer. Ferenc knew that Péter had done his best to improve the management of Tölgyfa Klíma and was very thankful. He decided to manage the company himself as he had learned many things from the last two managers of Tölgyfa Klíma.

"I made the right decision when I started the company. I had no business education so I decided to hire managers. Over time I have learned a lot from them and now I am able to manage my own business. I like being the boss and make decisions. Now I am planning to sign up for evening classes in management. I know the practical side but I am eager to learn more about the theoretical background," says Ferenc.

In conclusion the importance of management skills can be highlighted. Are some people born to be managers? Is it really important to be a manager-type from the very beginning or can these skills be improved with time? Are there skills that can be learned and skills that can't? If yes, what are the skills that can't be improved with time?

Case 1.6. The University of Ruse: following the 3GU concept

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Abstract: This case study illustrates the opportunities which exist for entrepreneurs to collaborate with universities. In theory and in practice this collaboration is an element of the so called ‘Third Generation University’ (3GU). The text describes the capacity of Ruse University and some of its activities in support to starters. The main idea is to show if and how an entrepreneur could collaborate with academics.

Key words: *Third Generation University (3GU), entrepreneurship, starters*

1. The city of Ruse

Ruse is a city of 150 000 people. The city is the centre of both Ruse District (population 220,000) and the the North-Central Planning Region (population of 1 million). Ruse is the largest Bulgarian port town on the banks of the Danube River. This river forms a 600 km border with neighbouring Romania with only one bridge crossing it– at Ruse. After the opening of the Rhein-Main-Danube canal in 1992, the Danube became part of the longest inland waterway in the world (3,500 km) connecting thirteen European countries. On the west side, Ruse connects to cities like Vienna, Bratislava and Budapest while on the east it is connected with the Black Sea through the Rumanian port of Constanza. These cities have had a strong influence on Ruse’s architecture and the city is sometimes called ‘little Vienna’.

The high bank at Ruse has been inhabited since the 4th millennium BC. In the 6th century BC Thracian tribes settled in the Ruse area. The first establishment was created under the Roman emperor Vespasianus (69-79); the Roman name of the city was *Sexaginta Prista* (the Port of the Sixty Ships). In the 19th century industrial age, Ruse saw many ‘firsts’ for Bulgaria: the first Bulgarian publishing house, the first model farm, the first railroad connecting Ruse with Varna, the first weather service, the first technical school, technical society and professional teachers' club, the first insurance agency, the first Chamber of Commerce and Industry, the first inland navigation service, the first telephone, the first moving picture show, the first Bulgarian newspaper, the first map and many others. New industries sprang up, banks and trade agencies were founded and European shipping agencies, as well as 17 foreign consulates were established. A large number of Bulgarian, Austrian, Italian, and Swiss artists created a wealth of architectural forms and styles characteristic of the period in Europe: neoclassicism, neo-baroque, neo-gothic style, art nouveau, and fin du siècle.

The city has always had a harmonious mixture of ethnicities, living together in peace and understanding. This was the microcosm that greatly impressed Elias Canetti – the Ruse-born Nobel Prize laureate in Literature.

The transition to a market economy after 1989 at first had an adverse effect on economic activities but Ruse’s citizens have always been very adaptable and economic life picked up relatively fast.

2. The ‘Angel Kanchev’ University of Ruse

Founded in 1945 as the Higher Technical School, the University of Ruse is one of the oldest Bulgarian universities; it was elevated to university status in 1995. The institution grew healthily and in 1985 it was ranked first among the Higher Schools in terms of its work research and development work. It is named after Angel Kanchev, – a Bulgarian rebel and intellectual, who died fighting for the freedom of Bulgaria from the Ottoman yolk when he was 22. The University has known periods of progress as well as stagnation, the overall picture being one of sustainable development. In the 1980s, it twice won the national competition for Research University and became recognized as one of the leading universities in Bulgaria. During this period, the University acquired most of its funding from industrial contracts, giving it considerable experience in research.

After 1989, during the years of transition, the University went through a period of stagnation, as did all Bulgarian universities. Despite the hard times, the University managed to maintain its high educational quality. The opening up of the country made it possible to develop close cooperation with many universities in Europe and the USA.

In 2010 more than 9000 students are taught in modern laboratories and classrooms. In addition, there are over 180 PhD students, distributed over seven faculties subdivided in 33 departments:

- Faculty of Agricultural Industry
- Faculty of Mechanical and Manufacturing Engineering
- Faculty of Electrical and Electronic Engineering
- Faculty of Transport
- Faculty of Business and Management
- Faculty of Natural Sciences and Education (pedagogy, mathematics, IT, languages, etc.)
- Faculty of Legal Studies

In addition, the University has a number of specialized centres: Study Centre; Centre for Further Education (CFE); Distance Learning Centre (DLC), Research Sector (RS); University Career Centre (UCC); University Library; University Computing and Information Services Centre (CISC); Centre for International Cooperation and Mobility (CICM); Department of Public Relations and Advertising; Foreign Students Directorate; Bulgarian-Romanian Interuniversity Centre (BRIE); Administration and Resources Sector, University Sports and Recreation Centre (USRC), etc.

Altogether, the University employs over 800 staff of which about 490 are academics; half of these are full professors, associate professors ('docent'), or hold doctoral degrees. The University has 19 buildings on the main campus with 175 lecture rooms, 130 laboratories and 26 other facilities. The overall area is over 35,000 m².

The University of Ruse participates in many international programmes, aimed at improving the teaching process: Tempus, Socrates, Leonardo Da Vinci, CEEPUS, DAAD, Know How Fund and Stability Pact. In addition, it participates in international research programmes such as: Copernicus, COST, PECO, COMMETT, 5FP, NATO, 6FP and 7FP.

At the beginning of the 1990s, Ruse University established its first graduate and undergraduate courses in the fields of management. In 1994 the Faculty of Business and Management was established, uniting some earlier departments. In 2010 the Faculty of Business and Management comprised of three departments: Management and Business Development, Economics, and European Studies. The faculty has long-term international collaborations with institutions such as Cornell University (USA), the University of Central Lancashire (UK), Volgograd State University (Russia), the Bucharest Academy of Economics (Romania), Karel de Grote-Hogeschool (Belgium) and others. Many members of the academic staff have lectured abroad through EU-funded programmes. The undergraduate and graduate courses are: Business Administration, Public Administration, Marketing, Industrial Management, International Economic Relations, European Studies; the post-graduate (Ph.D.) courses are: Business Management, Industrial Management, Economics and Management. Many of the students join the EU mobility programs and study in EU universities for one semester. Compared to the other faculties and even to the other Bulgarian universities, the Faculty of Business and Management has made great efforts to develop intensive international activities.

The Faculty of Business and Management is playing a key role in the transition towards the 3GU model. It has developed teaching materials for courses such as "How to Start and Run your own Business", "Entrepreneurship and Intermediation", "Small Business Management" and other courses in entrepreneurship. This has had an effect on the establishment of new technology based firms as we shall see later in this case study. Members of the faculty, supported by EU consultants, have taken the initiative for the establishment of an

Entrepreneurship Centre at the University of Ruse and a comprehensive educational programme. The following 4-step approach has been adopted:

- Awareness programs will be given to all students on engineering degree courses through the existing lectures in the field of economics and management. Some modules will be enriched with topics on entrepreneurship. The purpose of the awareness programmes is to acquaint students with the general idea of entrepreneurship.

- Elementary education. Students will be offered an elective course in entrepreneurship. This should give a deeper understanding of entrepreneurship while filtering out potential techno starters.

- Advanced functional education. Students of undergraduate and graduate courses in engineering can participate in classes in other faculties in order to learn about subjects such as business plan development, marketing, financing, intellectual property rights, etc.

- Advanced entrepreneurship education. Potential techno starters will be able to attend special seminars organized at the Entrepreneurship Centre with external lecturers such as consultants, businessmen, etc.

3. Activities concerning know-how commercialization and collaboration with industry

Over the years, the University of Ruse has developed a variety of activities, which will be of significant importance for the transition to the 3GU. First of all, the University has established, or participates in, specific institutions such as:

- *The Management and Business Development Centre Ltd, Ruse* – this was established under an EU Phare project as a joint venture company of the University of Ruse, the Ruse Chamber of Commerce and Industry and the Mid-Yorkshire Chamber of Commerce and Industry (UK). Each partner holds a third of the shares. The Centre engages in business consulting and financial planning and has an agreement with the European Bank of Reconstruction and Development (EBRD) in London for acquiring finance for companies. Another area of activity is human resource management (testing, appraisals, compensation systems, etc.). The Centre also aids foreign investment and is an important link between the University and domestic and international enterprises.

- *The Union of University Sponsors*, which could develop into a business angels club to finance young entrepreneurs. At present, it is a source of guest lecturers and business placements for students at the end of their courses.

- *The Career Centre* improves the link between students and business. It was established in May 2005 with the support of USAID, the Labour Market Project and Job-Tiger. About 5% of the students have been registered at the Career Centre and their number is continually increasing. The Centre organises a variety of presentations on finding appropriate jobs, preparation of CVs and cover letters, etc. It helps businesses to find the appropriate young staff. The Career Centre has been developed rather successfully in cooperation with companies from Ruse and the region, many of which are industrial and IT-related.

- *The Research & Development Sector (R&DS)* of the University of Ruse, founded in 1965, has as its main task the organization of research and production work as well as student internship. At present R&DS is the University's main unit for contacts with state and private organizations and firms. Within the framework of R&DS, groups of highly qualified scientists, doctoral students, students and technicians perform, on a contractual basis, fundamental scientific research, as well as development, implementation and consulting activities. The concrete results from the work of these scientific teams have been applied all over the country and in a number of other countries like Germany, Hungary, the Czech Republic, Russia, Belorussia, Latvia and others. Along with the creation of new scientific knowledge and products, R&DS helps to increase the scientific potential of the University staff, by modernising and updating the material and technical resources and the

training process as a whole. The Technology Transfer Centre (TTC) is a unit within the R&DS, founded in 2007 with financial support from PHARE.

- *The Centre of Distance Learning* is under development at Ruse University. For students from the engineering faculties laboratory work is very important. At this stage,, the role of distance learning in the Entrepreneurship Centre activities is limited to web-based courses in entrepreneurship.

- The University plans to convert laboratories into a business incubator. In addition, it collaborates with the non-governmental business incubators in Ruse, notably the incubator of the *Business Support Centre for SMEs*. This Centre was created in 1996 by the Regional Union of Private Economic Enterprise in Ruse, Ruse Municipality, the Ruse Chamber of Commerce and Industry and the Bulgarian Industrial Association in Ruse; together with the University these organizations now act as members of the Centre. In addition, techno starters can use the laboratories and other facilities of the University. Collaborative relations with the other incubators in the city of Ruse will also be strengthened.

Development

The University of Ruse today realizes it must undertake serious action in order to make the ‘second transition’ and become a 3GU. Failing this, it will have to accept the unattractive role of a secondary university, producing mostly undergraduates for local employers. The process of differentiation between first class universities and second class universities has already begun. The University of Ruse already plays an important role in the process of the economic development of the region and neighboring regions. With its variety of faculties, the University educates a professional workforce for enterprises at home and abroad.

3GUs also act as cradles for new technology-based economic activity. These universities become ‘and-and’ universities, addressing simultaneously the challenges of cutting-edge science and education with mass-education and small science. Mass education and mass research are suffocated by government interference and the resulting bureaucracy; it also suffers from the inefficiencies of so-called spreadsheet management and the faculty organization. For the University of Ruse there is no way back. If any 21st century university strives to be attractive for students and companies, it must undertake the transition to the 3GU model by adding to education and research the third component – commercialization of its know-how and cooperation with industry. In addition, techno starters should get adequate help when they establish their own science- or technology-based firms. The University counts the establishment and development of a Career Centre (already existing), Technology Transfer Centre (already existing) and an Entrepreneurship Centre amongst its main priorities. With the synergic effects of adding other elements, it is possible to fill in the contours of the 3GU and realize the desired change. The 3GU is the way forward, although it will take time to implement it.

4. Companies, created at or near the University

A number of companies have sprung from the University of Ruse. As there were few support activities in the past, student entrepreneurs very much created the businesses themselves, benefiting from lectures in entrepreneurship, the general entrepreneurial climate of the University, and the tacit support given by individual lecturers. Below we present some of these companies.

The case of Networx

When they began laying high speed network cables in the dormitory of the University in 2000, Svilen Maksimov could not have imagined that six years later he would be heading a significant Ruse company with over 60 employees. A student of informatics at the Universities of Ruse and Linz (Austria), Svilen found that he and his fellow students needed fast Internet connections in their dormitories. In his final year as a student, he started laying cables and providing services and was soon joined by two friends. The three friends worked as a trio for many years and are still the only shareholders of the company they named 'Networx'. With hindsight Svilen says: "Dormitories were a convenient place as students are willing to experiment and this way we learned a lot. We learned from the inventive students who brought us ideas and suggestions. We also, albeit in a different way, learned from students who acted as hackers, trying to steal our bandwidth and concepts. From them we learned security. Fortunately, there was a third category of students, the conscientious customers who paid their bills on time. If we had set it up in the centre of Ruse, it would not have worked."

They rented a small office on the campus, moving out as demand started to grow outside the University. The University was supportive but at that time did not have facilities to help them. However the lectures in entrepreneurship at the Business and Management Faculty were very useful for them. "It was one of the few lectures that were practical, taken from real life". But he remembers sadly that most students did not have a real interest in entrepreneurship. Svilen adopted a saying while participating in a Cisco competition: "I learn as I go". He takes this literally and listens to tapes about entrepreneurship while he travels in his car. He is always learning and has a keen interest in just about everything.

Networx now has over 108 km of glass fibre cable in the ground in Ruse alone, replacing copper and aerial cables. With a speed of 100 Mbps for every customer, the company offers technology that is 20 years ahead of its time and brings Internet and cable television into homes and offices. They will offer VoiP telephone services as soon as there is a generally accepted standard and they expect a major expansion of their business when this happens. The company also offers video-on-demand and runs a city-wide Wi-Fi service, making Ruse one of the few cities in the world where one can connect to the internet on the move and literally everywhere. At present, this service is free of charge but the company will soon sell vouchers with which customers buy capacity, very much in the same way that mobile telephone cards work.

Networx farms out much of its work. The laying of the pipes, through which the cables are drawn, for instance, is outsourced to construction firms. One cable contains 96 fibres, each capable of transmitting 10 Gb/second. Their only competitor in Ruse employs co-ax cables, which is the old technology. Networx used credit financing and in this way managed to avoid dilution of its stake.

Svilen thinks that the attitude of students as well as teachers needs to change at the University, but, he says "Of course it's now five years since I left the University and there have already been changes". Most students enter the University just to get their diploma. They do not have a real learning attitude and hope to find employment in established companies. This is why education should be made more expensive – like in other developed countries. The high fees will act as a barrier. Right now people from both sides– teachers and students- do not really appreciate the education being provided by the universities. Education should be more Internet-based; Networx buys just about everything on the net.

Case NIK-05

Nikola Zmeev has been working in the woodcutting sector for over 10 years, most of them as an employee of his father's firm. In 2005 he established his own firm (NIK-05 Ltd) with a main office in the village of Udelnik in the municipality of Slivo Pole. Nikola is also the manager of the firm.

The main activity of NIK-05 is the cutting up of wooden trunks and timbers into forms, that are suitable for use as fuel for heating. According to the Bulgarian National Classification of Economic Activities (2003) the

business of NIK-05 is the 'retail and wholesale trade of solid, liquid and gas fuels and similar products, code 5151'. According to the legal regulations, NIK-05 is classified as a micro firm.

While establishing his firm, Nikola Zmeev was a student of Business Administration at Ruse University, graduating in 2006. In 2007, he started a master's degree course in Regional Development Management in the same Faculty of Business and Management.

During the first year of his firm's activity Nikola Zmeev identified the need and advantages to supply intelligent energy in a form of pellets and eco-briquettes. Solid fuel is produced by biomass (plants) and he came to realise that the concept of energy efficiency is based on a transition to renewable energy sources (RES) for heating, including pellets and eco-briquettes. The use of wood for direct heating increases the share of RES but is contrary to environmental protection. For this reason, in 2007, Nikola Zmeev took his first steps to develop a new activity of his firm – intelligent energy production in the form of solid fuel (pellets and eco-briquettes).

Nikola considered that this initiative required the implementation of an innovation, which was beyond his personal capacities. He therefore contacted scientists at Ruse University for support and expertise, especially those from the departments of Business and Management and Agricultural Techniques. In the period 2007-2009 the following common activities have been being developed, based on the Business-University collaboration:

- Development of a horizontal diversification strategy for the development of NIK-05, by adding a new product to the existing market which is technologically different from the current products of the firm.
- Preparation of an application to the European Economic Area Financial Mechanism, Priority Sector 1 'Protection of the Environment'.
- Application to the Financial Mechanism for knowledge transfer support to firms (soucher system) at the Bulgarian Ministry of Economics and Energy.
- Establishment of contacts with local authority representatives (within Ruse region) and study of the opportunities for joint applications to the Program of Rural Areas Development (2007-2013) and Operational Programme 'Regional Development (2007-2013)'.

NIK-05 uses Ruse University academics as knowledge suppliers and implementers for research related to:

- legal environment, with direct influence on pellet and eco-briquette production;
- creating a business model and developing a management structure for the production of pellets and eco-briquettes, according to a specific technological approach;
- structuring the company's resources (financial, human, informational and material), that are necessary in pellet and eco-briquette production.

The task of Nikola Zmeev is to give the knowledge supplier full access to the documents and assets of NIK-05.

5. Ruse University Entrepreneurship Centre

In **June 2008** the Ruse University Academic Council approved all documents legalizing the Entrepreneurship Center as a unit in the R&DS, next to the TTC; funds are being sought to finance the activity. It is expected that the Entrepreneurship Center will be the main organizational element for techno starters, together with the lectures of the Faculty of Business and Management. It will allow techno starters, other students, alumni and other interested individuals to commercialize their know-how. The Centre must have horizontal hierarchical links with all faculties and departments and vertical hierarchical links with the Rectorate. There is a need to develop the University regulations regarding the generation of income from know-how commercialization and the adoption of a financial reward system to stimulate the academic staff to encourage students to become techno starters. The more generous the reward system is towards entrepreneurs, the more activities will be initiated in and around the University, thus making it more interesting to students and staff. Generating income from techno

starters is not the first priority. The Entrepreneurship Centre is a long-term initiative and it should effectively facilitate the University's efforts towards the adoption of know-how commercialization. It should be a driving force and a coordination tool for all activities concerning techno starts and know-how commercialization.

The following main activities of the Center to encourage entrepreneurship have been developed in close cooperation with the Department of Management and Business development, from where the majority of the academics involved in this process come.

-Business Plan Competition (<http://www1.ecs.uni-ruse.bg/fbm/BMD/Student.html>): this has been organized since 2000 and has played an important role in stimulating the development of entrepreneurial activities at Ruse University. Although the competition is open to students from all faculties it is mainly the students of the Faculty of Business and Management that participate. The practice of stimulating students to develop entrepreneurial skills by participating in the competition has to be spread to all faculties. In 2005, 2007 and 2009 some of the business plans were developed in answer to requests from firms. In 2010 many of the participants forwarded their business plans to Bulgarian funds.

-Small Business Management (http://www.uni-ruse.bg/UD/uchpBak/14400UPLB_B.xls): The next step was initiated in 2007 by two lecturers in Small Business Management. They have invited some businessmen to share their experience with the students, and give them opportunities to work on business proposals for the development of their firms. The students have to become practitioners and initiate new products, target new markets or make managerial improvements. This brings them face-to-face with economic reality.

-Student Company of Junior Achievement Foundation (http://nis.uni-ruse.bg/uchebna_kompania/): Since 2007 Ruse University has participated in this initiative, which is national and international. The Business Plan Competition has developed some expertise, which has been further upgraded by the Student Company. Every year the members (students) are different and they create unusual products. The main idea is to develop the business side of the products. In the period 2008-2011, 27 students from four faculties have participated in this initiative. Their activities have been broadcast on local and national TV (<http://play.novatv.bg/play/238754/>), as well as web newspapers.

-RESITA NET (<http://www.uni-resita.eu/FH-Sites/uem/index.php?id=1450>): In 2008, Ruse University became a co-founder and member of RESITA NET, which is an international academic network for educators in Entrepreneurship and Innovation. In 2010 it had participation from 15 universities and one institute from 12 countries. Through this network it became possible for some students from the University to participate in different activities, related to entrepreneurship: PhD students in Zaichar (2009, Serbia) and Resita (2010, Romania), master's students in Tirana, Albania (2009) and bachelors in Zenica, Bosnia and Herzegovina (2010). The network has become a cradle for a variety of initiatives.

-Web-based Journal in Entrepreneurship and Innovation (<http://fbm.uni-ruse.bg/jei>): Due to the cooperation of RESITA NET, it became possible to establish this international journal in 2009. The editorial board are from RESITA NET, while the authors and the peer reviewers are more diversified. The text is bilingual (English and the native language of the author) which makes it possible for starters from different countries to get some analyses and case studies at no cost.

-Master's program in Entrepreneurship and Innovation (<http://fbm.uni-ruse.bg/index.php?catid=43>): This was launched in 2009 with 15 students. The main aim is to help starters by educating them and giving them a variety of mentoring and coaching support. The classes (Appendix 1) are conducted at the weekend so students have time to develop businesses during the week. Some of the master's students have also participated in the initiatives of RESITA NET (2009) and STARTENT (2010).

-**STARTENT** (www.startent.eu): For the period of 2009-2011 Ruse University is a member of the STARTENT project, funded by the European Commission. It unites 9 partners from 6 EU states. It has a variety of initiatives to encourage entrepreneurship. Some of them are useful for the academics (like preparation of cases studies, teaching methods, knowledge exchange, etc.); other initiatives are useful for starters, because they can exchange experience in various ways; a third group of initiatives like business plan competitions with financial awards and face-to-face meetings with starters, benefit the students (would-be-entrepreneurs). In 2010 over 20 students from RESITA NET formed teams to enter STARTENT's 'Transnational Business Plan Competition'.

-**BG-RO research project** (http://www.nsf.gov/system/storage/Anne_es_2_and_3.doc): For the period of 2010-2012 Ruse University and Timisoara Polytechnics (Romania) are expected to develop a bilateral project related to the study of the entrepreneurship training needs of the students in the two countries. It is co-funded by the two Ministries of Education (the Bulgarian Department for Science and the Romanian National Authority for Scientific Research). This project has been initiated thanks to the two universities' membership of RESITA NET.

-**Harvard Business School Colloquium in Entrepreneurship** (<http://www.efer.eu>): This is organized by EFER and Ruse University academics were participants in 2008 and 2009. The project has brought knowhow to all dimensions of the entrepreneurship support provided at the University. For example, in October 2010 two Skype conferences were organized between the Bulgarian students from the Faculty of Business and Management and the Deputy-Head of the Centre for Innovation and Entrepreneurship at Lomonosov State University (Moscow).

-**ENTREPEDUC** (www.entrepeduc.org): In the autumn of 2010 over 100 students from the Faculty of Business and Management were involved in this global project (www.entrepeduc.org/collaborators), related to entrepreneurship education. Their responses will contribute to this global survey and increase the self-efficacy and identity of students intending to choose the career of an entrepreneur.

6. Conclusions

The underlying principle of the 3GU is the development and support of entrepreneurship. The existing units and activities at Ruse University are fundamental to this and it should be just a matter of time before positive results are achieved.

The key milestone is to find students and academics, willing to collaborate, but also to develop effective forms of collaboration. The existence of the Ruse University Entrepreneurship Centre and the activities which it has been developing together with the Department of Management and Business Development, are the basis for entrepreneurship support and the transition to the 3GU. Together they have managed to develop the institutional infrastructure within Ruse University and to begin to meet the needs of the starters. However, the number of students who make use of this infrastructure is still few.

Therefore the key areas of interest are: first, to show how the Ruse University capacity and entrepreneurship activities described above actually able to encourage the entrepreneurial culture among the students; second, to find ready-to-act, innovative students and upgrade their business skills and knowledge through the Master's programme in Entrepreneurship and Innovation.

One specific problem is that the Ruse University Entrepreneurship Centre has about 10 academics and they all combine teaching with mentoring (consulting) in their classes. This means that they are payed indirectly for their consultancy work. There are no non-academic personnel working in the front-office from 9.00am until 5.00pm. Therefore the Entrepreneurship Centre is in effect in the classrooms and offices of the academics from the Faculty of Business and Management.

7. Assignment questions

- A. How well prepared is Ruse University to undertake the transition to the 3GU? Is Ruse University ready to facilitate entrepreneurs in their start-ups? How is this facilitation is organised?
- B. What are the specifics of the firms described? What is the appropriate collaboration between them and Ruse University? Which faculties would be useful to these firms?
- C. How could a Master's programme in Entrepreneurship and Innovation play the linking role between the academics and the students who are potential starters?
- D. Search for information related to other universities which actively support their students in their entrepreneurial intentions.

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N.B. This case has been written as an extension to: J.G. Wissema (2006) *Technostarters and the Third Generation University*, published in Bulgarian by the Publishing House of the University of Forestry in Sofia,. The translation and adaptation of this book was sponsored by Ecorys South East Europe. Academics can obtain a limited number of copies from EcorysSEE@ecorys.com.

Appendix 1. Master's Programme in Entrepreneurship and Innovation, Faculty of Business and Management, Ruse University "Angel Kanchev", Bulgaria (established in 2009)

Objective. The Course aims to create:

- Technostarters (students who will start their own, technology-based enterprises).
- Internal entrepreneurs ("intrapreneurs"), who will have profit responsibility for managing a business unit in a larger enterprise.
- Technology managers/Innovation managers, specialists who will work as leaders of R&D and innovation projects in firms and provide a link between the 'world of technological development' and general management.
- Specialists in entrepreneurship who will work in a variety of jobs connected with
- entrepreneurship (in financial institutions, government, SME organisations, universities and others).

Tools: lectures, practical work, thesis research.

Required qualifications for participation. The Programme will accept:

- bachelors in Science and Engineering (from Ruse or other universities).
- bachelors of the Faculty of Business and Management or equivalent from other universities.

Curriculum

1st and 2nd Semester (only for the bachelors in Science and Engineering):

This year will start with a basic Introduction to Entrepreneurship followed by a number of modules that have been taken from the MBA course at the Faculty of Business and Management.

3rd Semester:

During the second year students will work on an actual business plan for their own company. To this end, students will be given in-depth knowledge needed to prepare the various components of the business plan.

Course 1: Introduction to Entrepreneurship

Course 2: Creating the business model

Course 3: Creative Management and Intellectual Property

Course 4: Sales management

Course 5: Production planning

Course 6: Financial and legal structure

4th Semester:

Course 7: Management of the Growth Processes

Course 8: Innovation Policy

Course 9: Business analysis

Course 10: Introduction to thesis research

Diploma thesis (supervised by Faculty staff members)

Case 1.6. TEACHING NOTES

1. Overview (Summary): This case presents Ruse University (Bulgaria) as an example of a new trend in leading universities all over the world; academic personnel carrying out consultancy work alongside their teaching and research activities. In this way, the academics commercialize their knowledge and at the same time offer invaluable support to starters.

The quality of the research and the teaching effectiveness are shown by the level of interest from business. The level of demand for such ‘business-university’ relations is an important factor in the survival of a university and in maintaining its position as a centre of specific excellence.

Ruse University intends to follow the good practice of the leading global universities, but it needs to undertake some realistic steps in this direction. This case describes the opportunities and capacities of Ruse University and tries to answer the question “How ready is this state university to help starters?”

2. Teaching/Training Objectives:

-To present the capacity of Ruse University to grasp the opportunities for its transition to a ‘Third Generation University’ (3GU);

-To present the business activities of some small firms and to outline some of the current and potential forms of business-university collaboration;

- To help students become aware of the importance of business-university links when they try to start their own businesses.

3. Intended courses and target audience(s):

- Students (starters), who plan to start their own business and need information which the academics could provide;
- Recently established firms which need the expertise of the academics and are looking for collaboration with a university;
- Academics looking for opportunities to commercialize their scientific knowledge by collaboration with business;
- Top university managers who have faced the need to generate extra income for the academics and the university.

4. Suggested training techniques (teaching methods):

- The case materials are given to the students to read in advance;
- The lecture room used for classes should be equipped with internet access and the means to deliver multimedia presentations of the web-based information on the university’s capacity for scientific and applied research.

5. Questions (Topics) for discussion:

A. How prepared is Ruse University to undertake the transition to a 3GU? Is Ruse University ready to facilitate entrepreneurs in their start-ups? How is this facilitation organised? The basic idea is for students to get to know the scientific capacity of Ruse University and to suggest ways in which commercial “business – university” links can be established. The focus is on the Research & Development Sector and its activities. It is quite possible that some students could prepare the ground for establishing business contacts with appropriate academics.

B. What are the specifics of the described firms? What is the appropriate collaboration between them and Ruse University? Which faculties would be useful to these firms? The small firms described in the case study are all different. This gives the idea that entrepreneurs from different sectors are able to collaborate with university academics. NIK-05 Ltd made contact with academics at its own initiative. The key point is that students should

be encouraged to look for collaboration with their academics. The experience of NIK-05 Ltd gives good grounds for optimism that such contacts are possible.

C. How can a Master's programme in Entrepreneurship and Innovation play a linking role between the academics and the students who aim to be starters? There are several possible dimensions to this question:

-Students should become aware that if they participate in a Master's programme in Entrepreneurship and Innovation they will be able to discuss their entrepreneurial intentions with their academics. Such a programme is useful for facilitating closer interaction between the academics (scientists with excellence in a specific field) and entrepreneurs (or would be entrepreneurs) and to help develop long term relationships between them.

-The top management of a university and faculties become aware that such a Master's programme could generate extra income for the academics. It could also facilitate better application of scientific achievements. Lecturers are able to develop business incubators in the class and to continue these business–university relations after the programme ends. All of this generates additional revenues for the institution and its academics.

-The academics themselves are expected to teach interactively. Thus they become excellent consultants able to participate in or even initiate commercial projects between business and the university.

D. Search for information related to other universities, which actively support their students in their entrepreneurial intentions.

-Students see that Silicon Valley at Stanford University (among other examples) is a result of successful collaboration between students and academics. The development of the businesses described in this case is also related to collaboration with academics.

-For the top university managers and the Deans this case is an opportunity to rediscover some good practice and to better forecast and plan the activities of the university or faculty they manage.

6. Assessment criteria:

Students could be assessed by the following criteria:

20% - preparation for the course. The lecturer would ask the students questions A, B, C and D to assess how carefully students have read the case in advance.

40% - developing a written proposal (200 words maximum) from a starter for collaboration with Ruse University academics. The proposal is a kind of 'road map', which shows the small steps necessary in this collaboration. It comes as an answer to questions A, B and D. The written proposal would show the readiness of Ruse University to become a 3GU.

40% - a written answer to question C (200 words maximum). In fact the Master's students pay to attend the programme and the academics are paid for their teaching. Everything they do together is directly related to entrepreneurship. How could this 'partnership' be useful for both sides – the students (clients) and the academics (producers of knowledge and skills)? Students' written answers should reveal their personal level of readiness to participate in such a partnership.

7. Additional readings and references if helpful

- Home page of Ruse University – www.uni-ruse.bg
- General information about the activities of Ruse University Entrepreneurship Centre. Available at http://nis.uni-ruse.bg/lab/view/cent_predpriemachestvo/
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Case 1.7. The beginning is half the battle: The Hive support

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Abstract. Enterprise support centres are created to support potential entrepreneurs and businesses to develop and grow through linking the academic environment with the business initiatives. The mini case studies presented in this paper demonstrates how businesses and potential entrepreneurs can be supported and benefit from an integrated approach realised through enterprise support centres.

Keywords: *entrepreneurship support centre, business ideas*

1. Introduction

Small and medium sized enterprises (SMEs) are the lifeblood of the UK economy, employing more people and generating a greater share of national wealth than the public sector and larger companies. Statistics show that up to 60% of start-ups are likely to fail within their first three years. However, with structured support some 80% are likely to remain in operation after the same period. This structured support can be actively facilitated through enterprise support centres that focus their activities in the following key aspects: providing entrepreneurs' with opportunities for personal development and support; offering a starting point with low cost facilities; offering small financial contributions; and providing an environment where people that share the same challenges can meet and discuss.

Entrepreneurial support centres are often created within or close to academic institutions in order to optimise entrepreneurial activity. Entrepreneurial support centres also assist in increasing the creative potential and entrepreneurial behaviour in staff, students and graduates. This case study presents how such support centres as HIVE, the purpose-built enterprise development centre of Nottingham Trent University in UK can successfully manage to provide support to young entrepreneurs in the four key aspects identified in the paragraph above.

2. Personal development and support

Young entrepreneurs often require personal development courses, and action based projects in order to explore the possibility of self-employment. The HIVE's main personal development initiative is the Headstart programme.

"Starting my business through The Hive has given me the extra confidence I needed to face the business world with knowledge, preparation and vision. The support has been, and continues to be, relevant and practical."

Debbie Inglis, Debbie Inglis Associates

"The Hive gave me the skills and business training to make my ideas a reality."

Emrys Plant, Pseudohero

"An entrepreneurial course that answered all my business questions"

Henry Dudzik, Freeform Design Consultants

The HIVE also delivers in-curricula accredited courses and one off workshops on entrepreneurship, as well as extra curricula activities for undergraduate and postgraduate students across the whole University. Other training programmes include [SmarTrak](#), [Enterprise Inc](#) and [Hivestart to...](#)

Mini Case - & Then ... moving forward with the help of The Hive

With a name chosen to convey a sense of constant progression, creative venture & Then Design has gained a little extra direction on the road to success – thanks to The Hive. Set up by Furniture and Product Design graduates Samuel Wright and Jamie Bowler, & Then Design has carved out a reputation for creating inimitable furniture, products and interior design for both the domestic and contract markets.

Said Samuel: “Studying at Nottingham Trent University gave us the massive satisfaction of showing and gaining appreciation for our work. Setting up on our own has helped us retain that sheer sense of enjoyment. Our designs have an element of fun alongside their aesthetic character and practical purpose – we would have risked losing that originality by working full-time for someone else.”

Prompted by a talk given in their final year - and knowing other Hive entrepreneurs whose businesses were still buoyant after several years - the duo enrolled for HeadStart in 2008 and have not looked back.

“HeadStart was very inspiring and gave us that push to go for it,” said Samuel. “Along with crucial advice about everything from tax and VAT to law, we gained a greater understanding of how to build a positive dialogue with potential customers and communicate our enthusiasm to others.”

& Then Design offers a complete service from initial concepts through to finished products, using traditional craftsman’s methods and UK manufacturing. Its first collection, ‘& here we go’, attracted phenomenal attention at events such as New Designers and the Heart & Design charity auction. An initial manufacturing contract for its iconic Qubastacking chair swiftly followed.

A second collection - ‘& again’ - built on that success and the company now offers over 15 products which have secured global attention and coverage in publications such as *Elle Decoration*, *Vogue Living*, *Icon* and *Office*. Since last year, the upmarketfurniture retailer Ellis + Louca Interiors has sold the collection at its central London store.

Investing in a strong presence at design shows has remained a cornerstone of the ‘& Then’ approach. The latest range, ‘& they’re at it again’, was recently launched to great acclaim at 100% Design. Other key achievements have included creating concept designs for venues such as Nottingham’s Broadway Cinema and the New Art Exchange.

Having built the business while holding down part-time jobs and freelance work, Samuel and James are currently developing their online sales and hope to move into their own retail premises eventually. As well as creating their own ranges, they are forging links with furniture manufacturers to develop new products and are helping promote other up-and-coming designers.

Throughout, they have benefited from monthly Hive mentoring sessions with a business expert, as part of the ongoing support they receive through the SmarTrak programme which follows on from HeadStart “Our mentor’s objective and informed input is invaluable,” said Samuel.

“Sometimes one of the biggest challenges is having the determination to keep going and we’ve suffered our fair share of false promises. Mentoring meetings keep us organised and positive, putting things in perspective and suggesting structured ways to keep pushing the business forward.”

3. Low cost facilities and experts network

Many students can start their own business in parallel with their studies. In order to organise such activity, resources and facilities are essential. A professional working environment with the appropriate accommodation and infrastructure to support new businesses can be provided by enterprise support centres. The HIVE provides facilities such as: hot desks, office units, meeting rooms and conference facilities; reception area and related services; kitchen and access to catering services; telephone, printing, photocopying, post, fax and office equipment; IT facilities with broadband and network access; access to the University’s information services, including library and useful databases such as Mintel and FAME; office units are also available to businesses at competitive market rates.

The HIVE also offers a complete support mechanism including: efficient signposting service to direct anyone interested to relevant organisations, opportunities and [events](#), including: accountants, lawyers, banks and patent agents; a wide range of organisations and government funded support service, an experienced mentor to provide advice and support, funding opportunities and grants from external organisation, networking and social [events](#), publicity and marketing opportunities in local and national media, and notification of awards and competitions.

These facilities described above are essential and enable the students who start their own business to invest little or no money in using all these resources, which is vital for the initial stages of any business development.

Mini Case Study - Hive furnishes designers with business know-how

Since launching from The Hive just two years ago, Grant Baker and Nick Jackson have lit up the international design scene with a striking range of contemporary lighting, furniture and accessories.

Their company, sonodesign, prides itself on creating simple, individual and desirable products which are manufactured in the UK to the highest standards and are now sold by over 40 prestige stockists worldwide.

The sonodesign success story began while Grant and Nick were studying Furniture and Product Design at Nottingham Trent University. A determination to see their final-year project designs reach the market spurred them to embark on The Hive’s HeadStart programme.

“Apart from GCSE Business Studies, I had no real knowledge of what setting up would entail,” said Grant. “HeadStart was brilliant for teaching all the basics, especially with issues

such as pricing which I had no idea about. It was also great to meet people who had been through the process themselves and made a success of their own enterprises.

“Now we’ve been running for two years, we take things in our stride more but The Hive’s help was critical in giving us that initial understanding about how to create a profitable venture.”

Although operating from their own premises, Grant and Nick have benefited from The Hive’s location at the University, gaining access to state-of-the-art design engineering and manufacturing technology workshops. This has proved very cost-effective and convenient for developing prototypes.

They also feel reassured that, through the SmarTrak programme of support, they can continue to call on guidance from The Hive when they need it. Monthly sessions with their business mentor are a welcome chance to assess progress, refresh ideas and gain an objective view. “You cannot put a value on that level of advice – the chance to talk through with a business expert any problems you have encountered,” says Grant.

The Hive’s support has enabled the firm to garner a series of high-profile accolades. These include the Hidden Art ‘outstanding new business’ award for 2009, a prize celebrating designer-makers who have stood out from the crowd in their first three years of business. Meanwhile, a coveted grant from the Arts Council has assisted with product development as well as national and international brand building.

Such successes reflect not only the quality of the sonodesign product range - which spans everything from distinctive lampshades to eye-catching clocks, candle-holders to doorstops - but also the duo’s passionate commitment to using UK manufacturers and making their mark as a British brand.

Thanks in part to sonodesign’s well-received presence at design shows in cities such as New York and Paris, the products have now been propelled into the international marketplace. They can be purchased from retailers as far afield as Dubai, Los Angeles and Barcelona, with latest orders coming in from countries such as Chile and Brazil. The company now has its own distributors in Scandinavia, Japan, France and Poland.

In a new venture, it has also launched sono consultancy – providing an original design service to meet challenging briefs from furniture and lighting companies

4. Financial contributions

Enterprise support centres often offer financial contributions (Seed Capital) to new entrepreneurs. These financial contributions can be in the form of grants. Such grants are essential especially to businesses that need to invest in specialised equipment for carrying out their work activities. In addition to the low cost facilities,

The financial contributions assist in creating an environment of safety and confidence to the new entrepreneurs. Safety and confidence are important for the success of these new enterprises.

"Starting your own business can be daunting. The Hive took away any fears I may have had and helped me with the advice and support I needed to implement my business ideas. I met with my mentor regularly and she kept me on track with my plans. I also benefited hugely from access to The Hive's facilities and resources. In fact, The Hive remains a strong foundation on which my business was built."

Julia Mitchell, Toast PR

5. Creative environment

The enterprise support centres also provide opportunities for the new entrepreneurs to apply market intelligence to business ideas, while being given the freedom to innovate and invest. An environment that encourages the testing of the business ideas but also provides the young entrepreneurs the skills to innovate through appropriate expert help, mentoring and in-house training can ensure greater success rates in the development of new business.

The HIVE provides this environment for young entrepreneurs who can also benefit from the knowledge base of the University but also through exchanging experience and ideas with other new entrepreneurs. The hosted entrepreneurs meet regularly to exchange experiences and find ideas that could explore using the competencies of each other.

The Hive has designed a network specifically for supporting new and existing enterprises. It is an online area where businesses supported by The Hive can communicate with one another. This dedicated space gives an informal opportunity to new entrepreneurs to: ask each other for advice; share knowledge and ideas; recommend suppliers of business services; notify one another of useful events and resources.

Enterprise inc.

The Hive has developed a number of other highly innovative support programmes in order to cater for specific niche markets. The Enterprise Inc programme was developed in conjunction with the other East Midlands Universities and built upon the success of a previous national programme called SPEED (Student Placements for Entrepreneurs in Education) This programme allowed undergraduates who have a business idea and the passion to work on it before graduation, to spend their placement year working on their business. The programme is recognised by the University and their work counts fully towards their course marks.

Mini Case Study - Hive's package of support for award-winner Luke

Hive entrepreneur Luke Thomas wrapped up his first year in business by winning a prestigious award for his revolutionary packaging system, Chameleon.

His success in securing the £5,000 Innovation in Development prize at the annual Lord Stafford Awards was testament not only to his ingenuity and perseverance but also to the ongoing commercial support he has received through The Hive.

Since graduating from Nottingham Trent University with a BA (Hons) Product Design in 2009, Luke has translated an idea which began as a course project into a groundbreaking product with potential applications in markets from confectionery to healthcare. The award judges said that Chameleon, a multi-purpose recyclable

container, could have a major impact on the global marketplace.

“It’s great to have that level of recognition within a year of setting up – but so much of what I’ve achieved has been down to the help of The Hive,” said Luke. “I’ve gained funding, advice, business knowhow – and now this award. Without The Hive, I would have struggled on the business side of the venture and my idea might have stalled.”

Chameleon builds on today’s waste reduction and recycling crusade with an innovative twist. The packaging folds down to become a container in its own right and can be used in diverse ways – from a quirky bowl for sweets to a hygienic dispenser for medication.

Only after talking his aspirations through at The Hive did Luke recognise the full potential of his idea and the need to safeguard it, even to the point of withdrawing it from his degree show as he explored the patenting process.

Having joined the Enterprise Inc programme, Luke gained a cash bursary, advice on patent searches and intellectual property management, assistance with funding bids and vital contacts for his fledgling company, LBT Design.

It led to a collaboration with Leicester’s De Montfort University, where he has been perfecting ways of making Chameleon sealable and capable of retaining liquids. It also paved the way for a pathfinder grant from the East Midlands Development Agency plus an association with Medilink, the region’s healthcare and bioscience innovation network, to explore medical applications for his product.

“Tapping into all the enthusiasm and interest you get from The Hive drives you on,” said Luke. “My whole support network has grown and, if I reach a hurdle which is slowing me down, I know I can turn to several experts who will help me sustain the project and keep it moving.”

The challenges of IP have been Luke’s biggest obstacle. The Hive put him in touch with a specialist IP consultant who helped him to file a patent for his product and to explore a licensing deal. Over recent months, Luke has been engaged in negotiations with leading packaging manufacturers and confectionery companies.

“It’s quite amazing that an idea I came up with in my bedroom while I was at university has attracted attention from leading names in the industry and has even won an award. The prize money will help me push my idea forward in a variety of markets. As a designer, I just want to see it actually being made and on the shelves now,” Luke concluded.

Hivestart to...

Another new and innovative programme accessed through The Hive, is Hivestart to...originally designed to provide specific support for aspiring entrepreneurs in the creative industries.

Hivestart to...is a programme that brings final year students from a range of programmes together. It is for participants who are seriously considering self-employment and it is designed to help them identify and take next steps. Many participants have gone on to start their own businesses after taking part in this programme, including a charity shop, a graphic artist, a silver smith, several photography businesses, ceramicists, film makers and a fruit and vegetable store.

It is an experiential programme. Participants are encouraged to consider ways of engaging with the world beyond university. Participants develop a stronger understanding of their own value and realise that there isn't only one right way, there can be their way. The programme provides knowledge and approaches that enable participants to understand how to make a difference.

"I'd recommend this programme to other students because it's mind-opening, inspirational and it guides/shapes paths."

HiveStart to... participant 2009 – 2010

The program content has been designed by creative business people to provide participants with confidence, awareness, skills and know-how that can improve their chances for future success and satisfaction. HiveStart to... sessions are half-day workshops that cover the following aspects: self-awareness; communication; presentation; networking; problem solving; organising; managing; motivation; and ambition. Current issues such as design ethics, social sustainability and community engagement are also elaborated. The overall design of the program aims to offer participants the opportunity to learn how to take advantage of opportunities. Sessions on market research, business planning, branding, financial awareness, intellectual property, selling, routes to market are run by specialists in the creative industries.

"HiveStart to... is very helpful in deciding if you can potentially run your own business. It also helps develop transferable skills that you can use in your degree and whole life."

HiveStart to... participant 2009 - 2010

"It helped me gain so much confidence and I am now more pro-active in my approach to work and life"

HiveStart to... participant 2009 – 2010

Case 1.7. Teaching Note

These case studies are intended to demonstrate the four key aspects of entrepreneurial support that are considered essential for actively supporting entrepreneurship. They can also be used to inform decision makers in practical terms on how entrepreneurship can be supported practically and effectively and presents a case that demonstrates the benefits to the entrepreneurs and to society as a whole of creating such entrepreneurship support centres. The cases are narrative-based in order to demonstrate the contribution of enterprise support centres in assisting young entrepreneurs test and develop their business ideas.

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CHAPTER 2. INTERNATIONALIZATION

2.1. Forweb Software (CEIM – BIC Madeira)

2.2. The British Romanian Consultancy (NTU)

2.3. Hydrogen power Co (POLITO)

2.4. Automotive components Co. (POLITO)

2.5. Financial services Co. (POLITO)

2.6. Engino - Play to invent TM (CYU)

2.7. Consultancy services in the field of education: The case of
“Cambridge Studies” Ltd. (ITC)

Case 2.1. ForWeb Software – a micro company but a global business

Carolina Malheiro, CEIM – BIC Madeira

ForWeb Software is a young Portuguese company that develops Web platforms for the international market. Since its beginning, when it had just one product on the market it has grown steadily and currently has clients and users spread across 5 continents and approximately 500,000 visitors to its site each month (December 2010).

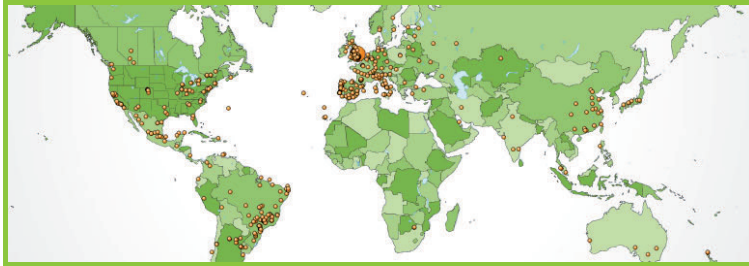


Figure 1 - Global distribution of clients - 2009

According to André Gonçalves, ForWeb Software owner and CEO, the company's mission is '*creating user-centric Web applications with simplicity, robustness and speed as their main characteristics, which offer solutions to specific problems for some global market niches.*'

The entrepreneur's background

André Gonçalves holds a degree in electrical and computer engineering from *Faculdade de Engenharia da Universidade do Porto* (the College of Engineering in Oporto University).¹⁰ He has several years of experience in software development both in Portugal and in the international market with various companies including: French Alcatel e-Business Division (in Portugal)¹¹; American NextiraOne¹², SmithBid.com and Zenter (acquired by Google in Portugal; Portuguese Novis (acquired by Optimus in Portugal)¹³ and TMN¹⁴.

After 7 years of experience, he saw an opportunity to use his skills create something new that could be commercialised online and he decided to launch his own project called ForWeb Software.

André was working as a freelancer, creating statistical platforms and survey and database analysis platforms for several companies. He came up with the idea of a programme available on the Internet, that would allow anyone to create, publish and analyze surveys and forms without difficulty. And that was the beginning of 'QuestionForm.com'¹⁵.

The project

The QuestionForm.com project emerged in 2007. At this time, the online software available for creating, publishing and analysing surveys and forms was all payable and not at all user-friendly. So André Gonçalves

¹⁰ College of Engineering from Oporto's University: www.fe.up.pt

¹¹ Alcatel: www.alcatel-lucent.com

¹² NextiraOne: www.nextiraone.eu/pt/

¹³ Novis: www.novis.pt

¹⁴ TMN: www.tmn.pt

¹⁵ QuestionForm: questionform.com

decided to create simpler software which would be free to use, less complex and based on the most up-to-date platform - Web 2.0

The tool developed facilitates the use of online surveys in a user friendly environment. It allows users who are unfamiliar with the technology to easily build an online survey and then to both collect and analyse the data.

With this tool, the consumer can design questionnaires and forms that can be inserted into websites or blogs or sent via email to facilitate data collection. Tracking responses is also possible in the web application itself, so that it is easy to know exactly who responded to the survey. Moreover, the tool generates a complete report with statistics for each questionnaire or survey built, even in its free version.

QuestionForm.com was designed with the customer in mind. This is shown in the changes made following the release of the beta version, which predated the formation of the company and served mainly to showcase the product and gather the views of future customers (the beta version was developed in four months and the testing phase lasted approximately two months).

Results, obstacles and flows

Since the beginning of the project, the main difficulty has been competing with other companies who were already well-known in the online market, such as SurveyMonkey.com, QuestionPro.com, etc.

QuestionForm.com is mainly used by free online users with limited use of the tool (in 2010, 95% were free users). However, the product is also offered for more advanced users with more features in different paid modalities (18% of the payers are using the basic modality, 50% the Plus modality, 22% the Premium modality and 10 % are using a specific modality not contemplated in the website – enterprise modality).

questionform

Pricing / Account Comparison

Pay as you go, Cancel, Downgrade or Upgrade at any time. 30-day full money back guarantee.

No long term contracts, no sign up or termination fees!

Features	Free	Basic	Plus	Premium
Monthly Price	\$0.00 USD	\$9.95 USD	\$19.95 USD	\$49.00 USD
Number of Surveys (1)	2	4	8	Unlimited
Allowed Progresses per Survey	Unlimited	Unlimited	Unlimited	Unlimited
Number of Questions Allowed	2	10	Unlimited	Unlimited
Email Surveys and Tracking (2)	No	Yes	Yes	Yes
Multi-Page Surveys	No	No	Yes	Yes
Multi-Language Surveys	No	No	Yes	Yes
Custom Templates and Logic (2)	No	Yes	Yes	Yes
File Upload	No	100 MB	500 MB	Unlimited
SSL Security (2)	No	No	No	Yes
Technical Support	No	Email	Email	Email/Phone

CHRONIFY MEDIAN VISA PayPal

Figure 2 QuestionForm Features

However, despite economic globalisation, the increase in new technologies and internet usage and the growing competition, the ability of André Gonçalves to upgrade the service allowed him to increase market share and attract users in various places throughout the world. The greatest proportion of visits to the website are from South America and the main users are from Argentina and Brazil.

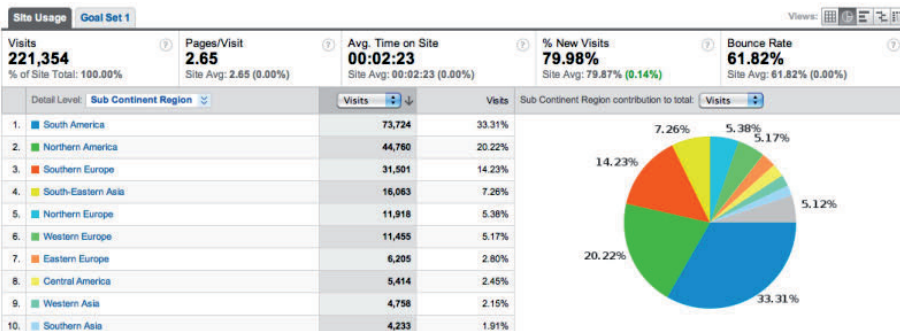


Figure 3 – QuestionForm Users by Country in February 2011

ForWeb Software gambled on a strategy focused on innovation and new solutions for a niche market and it also benefitted from being the first mover. In 2007, internet users had the possibility of creating, publishing and analysing surveys online for free (albeit with some limitations).

Considering the type of technology used for their product development the company was seen as one of the most promising Web 2.0. solutions by the Spanish bank ‘La Caixa’ and recognized as an innovative project, winning the CEIM BIC Madeira innovation award in 2008.

The company’s location on a small island in the Atlantic Ocean presented some constraints such as insularity, the geographical distance from the mainland, and the small size of the territory and the market. This, together with the company’s dependency on only one product, forced André Gonçalves to market ForWeb Software’s services across borders.

However, there was an important flaw in the project. Although the service was already provided in different languages, i.e. the questionnaire could be built in several languages according to the country of the user (as you can see in the images below), the website and instructions were available only in two languages: English and Portuguese.

This was a limitation to the service and was seen as its greatest weakness and contrary to the overall business strategy of operating in the world market.

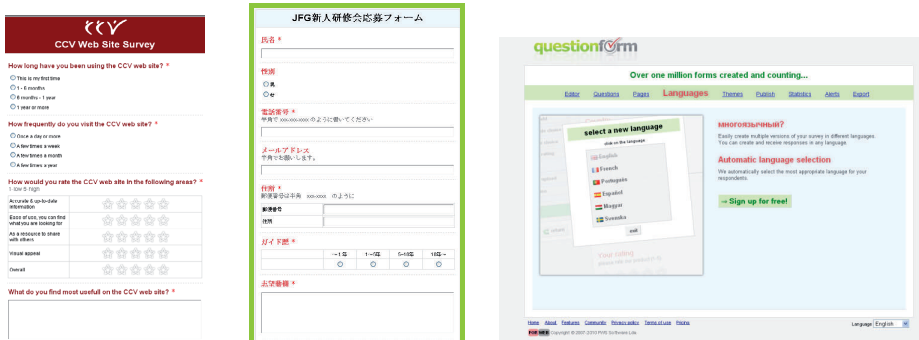


Figure 4, 5 and 6 Examples showing the different languages available

Therefore, looking at global trends and recognising that the tool was intended for Internet users anywhere in the world, André Gonçalves decided to invest in making the questionnaire available in other languages. He also made the decision to update the payment facilities on the website by utilising secure service arrangements, such as PayPal.

In addition, ForWeb Software has developed customized solutions for clients who visit the QuestionForm website. André Gonçalves believes that in 2011, sales of these customized solutions will overtake the main product – the surveys on QuestionForm.

Thus, we see that the success of this project since its early days was in being a world-oriented company, which is why they opted for a strategy called “Born Global”¹⁶.

It is appropriate to describe this company in terms of international entrepreneurship, i.e., a business that has gained significant competitive advantage from having selling opportunities in several countries. The main features of the business are its strong capacity for expanding business operations into other countries and the high risk environment in which it has operated since its creation.

The concept of market potential being limited by the physical boundaries of a country is increasingly outdated and unsuitable. Expanding the geographical reach of a company is now much easier not only because of the lowering of customs barriers, but also because of improved ways of managing business at a distance. There are also other drivers of the expansion and internationalisation of companies, such as economic and political factors, and social factors, such as the globalization of standards of life and consumption and a more comprehensive knowledge of foreign cultures.

The internationalisation of companies is mostly associated with the creation of partnerships or the use of information technologies as a means of disseminating their products or services. These market opportunities, especially those related to the development of information technologies (more specifically the Internet) have allowed smaller and less financially strong companies the possibility of internationalizing.

The decisive factors in the global success of ForWeb Software were the entrepreneur’s network of contacts, his knowledge of the product’s characteristics and the increased dissemination through the Internet.

Open Questions for debate

1. What is the importance of starting a global business that will be available on the Internet using a demo?
2. Can a global business operate only in English or is it important to provide for other languages?
3. What are the ‘Born Global’ companies? Can we talk about international entrepreneurship in these cases?
4. Is the Internet an indispensable part of any internationalization strategy?
5. What is the role of the entrepreneur in achieving success in a project?

¹⁶ Born Global companies should obtain at least 25% of turnover from outside of the host country (more than one continent), within three years of their creation and have competitive advantages in the use of resources and sales of products in several countries (Andersson and WICTOR, 2001).

Case 2.2. The British Romanian consultancy: Is networking important?

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The
British Romanian
Consultancy

Abstract. The British Romanian Consultancy (BRC) is a business development consultancy that has the right network, information and skills to help British businesses expand successfully in Romania, a new European market with major potential. This case study provides insight into the importance of networks within different cultural contexts for international business.

Keywords: *New market, networks, international business, culture*

The British Romanian Consultancy (BRC) was set up in 2010 by Lorela Corbeanu, a former political adviser in the Office of the President of Romania and a consultant for the EU accession of countries in the Western Balkans. Lorela is currently studying for her PhD at Nottingham Trent University. Her subject is the fight against high level political corruption. She was educated to Master's level in Romania and worked there for many years. She is therefore fully aware of the cultural and political particularities of the country.

Lorela has a rich insight into Romanian politics and public administration, gained during her 5 years of work experience in Romanian public administration. Over time she has developed a wide network of personal contacts in Romania and the EU. Her political and professional experience and her education, helped to train her to foresee political and economical changes in Romania and to gain excellent interpersonal communication skills. Lorela is a competitive person, motivated by success, who likes to “make it happen”. Shaping projects and transforming them into a success is how she seeks to fulfil her potential.

Positioned in the south-eastern part of Europe, Romania joined the EU in 2007. It has a strategic location bordering Bulgaria, Serbia, Hungary, Moldova and Ukraine and just across the Black Sea, Turkey. Romania is the second largest consumer market by population (after Poland) in Central and Eastern Europe. It has an important domestic market of 21.7 million consumers, which increases to a potential 100 million taking into account the neighbouring countries.

Romania is the beneficiary of €30 billion of structural funds from the EU for the period 2007-2013 of which €13 billion is for agriculture alone, however, only €1.5 billion had been accessed by the end of July 2010. Being an EU member, standard EU business practices apply in Romania. Customs and other regulations are in accordance with EU law. The government though has designed a series of tax breaks to boost investment in different economic sectors. Romania has a young and well-educated work force and, English is widely spoken.

There are more than 4,000 UK firms in Romania and UK investment amounts to more than €4 billion, making it one of the Romania's top 10 foreign investors behind countries like France, Germany, Italy, Turkey, and Netherlands. British expertise and experience are welcomed in agriculture, construction, environmental projects, consultancy, water, railways and project management for structural funding.

For companies interested in expanding into Romania, BRC provides flexible services that help them to understand the business opportunity and decide accordingly. The market understanding and knowledge offered by the BRC provides the basis for a detailed market analysis and exploration of the business opportunity, ensuring that investment decisions are properly costed and fully investigated.

The selection of local partners is an essential step in establishing a business in Romania and obtaining financial support. The BRC identifies potential partners and guides investors in their choice. BRC reviews the potential

partners and organises interviews with them to get insights into their personalities and the organisations. Furthermore, it identifies and proposes local legal representation to ensure that the processes are followed correctly, local laws are adhered to and costs are minimized. The BRC can also provide support in getting finance by drafting the application to the appropriate body and monitoring its progress.

Getting the inside track is one of the most important aspects when setting up a business in Romania. Obtaining help from an experienced Romanian advisor with political experience at a high level of the administration, an insider who can help you understand the country's political and economic development and its cultural, social and political particularities can help avoid costly mistakes.

In the medium and long term the BRC aims to expand and become an internationally recognized company. In order to pursue these objectives, it has been benefiting from the very helpful support of the HIVE business team in Nottingham Trent University during its setting up and development. The BRC has its main office within the HIVE venues in Nottingham, and a presence in London and Bucharest. The services are sold directly through the BRC.

The services provided by the BRC have three major advantages for any investor: they allow the British investor to be fully aware of the local situation so that this will not be an obstruction but an opportunity. They also allow customers to have full control over their business and to make decisions based on a full knowledge of how things are in the field and what the future perspectives are.

The competitive advantage of the BRC arises from its unique professional contacts network created during Lorela's professional activity, its increased flexibility compared to bigger companies, and the capital of knowledge and insight possessed by the owner. The BRC provides permanent assistance during visits to the field and throughout the process until a decision is made and the setting up of the business is accomplished.

CASE 2.2. TEACHING NOTES

This Case Study focuses on exploring the importance of networking in different cultural contexts for international business. It aims to inform managers, business experts and students of the basic concepts of networking and its importance. It can be provided as teaching material to generate in depth discussion on the focus areas. Readers should be able to gain more detailed knowledge of the importance of networking and how this is impacted by the cultural characteristics of a country.

Question 1: What is networking?

Networking is the ability to create relationships for the purpose of career building and socializing. “It is not what you know but who you know!” Networking involves building effective relationships and friendships through communication.

Question 2: Why is networking important?

Networking is considered to be essential in business. Good networking provides the opportunity for a business to obtain information about the market more quickly. As such, it facilitates the decision making process based on up to date information.

Question 3: Is networking dependent on the cultural characteristics of a nation?

Networking is an extremely valued competence especially in countries that are more relationship oriented. Good networking provides the ability to learn fast about the local conditions, and establish good business contacts. Bad networking would result in having a restricted view of what is going on and might also hinder the process of obtaining the information needed for business growth.

Question 4: What are the competences of Lorela Corbeanu that helped her to make her business successful?

The basic competences are her experience in Romanian public administration, and her ability to network effectively. Her previous work experience in public administration has helped Lorela to have an in depth knowledge of how the systems in public administration and business networks operate in Romania. As she is Romanian she has detailed knowledge of the cultural side of building relationships. Her networking skills help her to find the right information quickly and to be able to assist foreign companies by finding the right links and saving them time.

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Case 2.3. Hydrogen Power Co.

By **Emilio Paolucci** (Department of Production Systems and Business Economics, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129 Torino, Italia. Tel:+39 011 564 6100. Fax:+39 011 564 6319. Email: emilio.paolucci@polito.it), **Alejandro Garcia Berra** (Politecnico di Torino), **Emanuele Sandri** (Politecnico di Torino) and **Leo Italiano** (Politecnico di Torino).

Abstract: Hydrogen Power, a high technology company, founded by a university professor and an experienced entrepreneur, faces the challenges of business development and international growth. In doing this it collaborates with universities to bring high technology products to the market and develop a clear strategic plan for the venture.

Keywords: resource allocation, academic entrepreneurship, green technology.

Note: This case study was written for the purpose of stimulating learning and discussion. The authors compiled it in November 2010. The individuals, events and difficulties referred to are real, but have been disguised reasons of privacy.

Introduction

What started as just an idea that came up during an informal dinner between friends became an extremely successful high technology company in the power systems industry.

Sam is a university professor, who among other subjects, taught entrepreneurship and business-planning. On the other hand William, his long time friend and recently business partner, is an experienced entrepreneur whose first company is listed on the Milan stock exchange.

They started with an idea and through their determination and ability to put together the necessary resources they created Hydrogen Power Co. (HP Co.). Five years after its foundation, this company has developed cutting-edge technology for hydrogen powered backup power systems and markets its products in Europe, America and in the Asia-Pacific region.

Company background

When it was founded the company's mission was to provide environmentally friendly primary power solutions at a competitive cost. However, this initial objective had to be abandoned due to technological and logistical reasons. Hydrogen-fuelled powered systems produce electricity using hydrogen, but the efficiency of this process is lower than other solutions so the operating cost was not competitive. Besides this, the logistics of using hydrogen tanks presents many challenges since there is no real distribution network for this gas.

The company re-defined its goals and established itself as a key player in the sector of fuel cell systems for mission-critical backup power applications. In this sector, hydrogen-fuelled power systems represent a more environmental friendly, and often a cheaper solution, than battery based backup systems.

The company currently offers two main products:

- A hydrogen-fuelled power system that requires hydrogen tanks and that can be installed indoors or outdoors.
- A hydrogen-fuelled power system that produces its own hydrogen when connected to the grid and then utilizes it to produce electricity if the grid fails. This solution is particularly convenient for applications in remote areas.

These products have very diverse applications but, due to their power range, HP Co. mainly targets big utility companies such as telephone companies that need backup power systems to maintain their networks when there is no electricity.

Early days

Sam and William started their business together. Sam took care of the organization of the activities while William was the commercial end of the business. At first they outsourced all research and development activities to a laboratory specializing in hydrogen fuel cells, but after one year two researchers from that very same facility, who had vast experience in hydrogen power systems, joined the entrepreneurial team. This enabled them to carry out the R&D activities, which were vital for their products, within the company.

At that point in time the company was a start-up, which employed only the four founders. There was not a defined product yet but the company had already sold the first prototypes and beta tests were about to be carried out with an Italian lead user- 'Telecom Italia'.

The company did not have a clear perception of the market and since the most important market was presumed to be America, Sam and William decided to participate in the 2006 round of an internationalization programme organized by a well known American university¹⁷ in order to evaluate HP Co.'s opportunities and define an entry strategy for the North American market. The local chamber of commerce made it possible for the company to participate at an extremely reduced cost as part of its own activities aimed at fostering internationalization. This kind of internationalization support programme allows high technology SMEs to search for opportunities in foreign markets, reducing the cost and time needed to obtain the necessary resources to carry out foreign development investments. The company's participation in the programme was also due to the fact that, as a professor at a university which promoted interaction between private companies and universities, Sam knew very well the benefits that both companies and students can obtain from this kind of collaboration. Previous agreements he had made with other entrepreneurs on behalf of his university had helped to bring to the market the most innovative technologies and he and William were hoping that this time HP Co. would manage to improve the definition of their product roadmap to ensure the company's fast growth and international success.

The result of the company-university collaboration for Hydrogen Power Co.

The results Sam and William obtained from their participation in the programme were very useful for the company's growth and development. They received useful advice on how to improve their marketing and sales strategy and how to redefine their strategic objectives.

Through their collaboration with the American university they understood that although they had started their business to provide an environmentally friendly solution to an every day problem, none of their potential consumers would have bought their product just because it represented a more environmental friendly solution than the one they were utilizing. Being green was not the key to selling, so they had provide a product that allowed their costumers to reduce their Capexs and Opexs since nobody seemed to be willing to pay more for a greener solution.

They also understood that the US market was not their key objective, and they were able to reach this understanding without incurring significant costs. In fact, the students provided the company with an in depth market analysis, that HP Co. would have found unaffordable otherwise, which highlighted the difficulties that the company would have had to overcome to target the US market.

¹⁷ The internationalization programme is a unique educational programme that matches full-time MBA students with existing international high-technology companies to develop a comprehensive business strategy in order to enable these companies to move to the next stage of corporate growth.

The last important thing that they obtained was the capacity to devise a clear and written strategic plan in order to attract the venture capital investment that was vital for the development of their products.

After the re-definition of the strategic objectives that resulted from their participation in the programme, HP Co. obtained financing from a venture capital fund and Sam and William were able to put together all the necessary resources to develop the leading-edge technology that they are currently commercializing.

Questions:

- *Do you believe that HP Co. would have been able to obtain the same results elsewhere?*
- *Do private companies really understand the value that they can obtain through collaborating with universities?*
- *Do you believe that student sand universities benefit from working directly with companies?*

Case 2.4. Automotive Components Co.

By **Emilio Paolucci** (Department of Production Systems and Business Economics, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129 Torino, Italia. Tel:+39 011 564 6100. Fax:+39 011 564 6319. Email: emilio.paolucci@polito.it), **Alejandro Garcia Berra** (Politecnico di Torino), **Emanuele Sandri** (Politecnico di Torino) and **Leo Italiano** (Politecnico di Torino).

Abstract: Automotive Components Co. is a family business started by John and Albert Loyd. The father and son team believed that they could “do it better”, so they procured financial support from a local bank and purchased the necessary machines and equipment to begin producing stamped parts for local customers. They have managed to build a successful business over the last fifteen years and are currently facing the challenges of internationalization.

Keywords: *Strategy implementation, international entrepreneurship, venture development.*

Note: This case study was written for the purpose of stimulating learning and discussion. The authors compiled it in November 2010. The individuals, events and difficulties referred to are real, but have been disguised for reasons of privacy.

Introduction

The founders, John and Albert Loyd, decided to create their own company back in 1995 based on their accumulated work experience with other metal forming companies. Albert was newly out of university when he joined his father and together they founded Automotive Components Co. (AC Co.). The father and son team could benefit from the experience that John had gained working with other metal companies and from all that Albert had learned during his studies in industrial engineering and management.

The father and son team believed that they could “do it better”, so John Loyd procured financial support from a local bank and purchased the necessary machines and equipment to begin producing stamped parts for local customers.

With John responsible for the production and Albert taking care of the commercial end of the company they managed to build a successful business that initially provided components for the Italian automotive industry and that now has expanded to serve other markets.

Company background

AC Co. is family-owned and operated by the founders, John and Albert Dal Loyd, who began the company in 1995 in Alpignano, Italy. The company has grown substantially over the past fifteen years and currently employs 70 people to run the daily operations. To date, Albert has been leading the general management and marketing and sales function, and John has been overseeing operations. They are supported by a competent staff, including quality managers, production supervisors, logistics managers and a production and materials scheduler, as well as customer service, human resources, and accounting personnel. Many of the shop-floor employees have worked for the company since its inception.

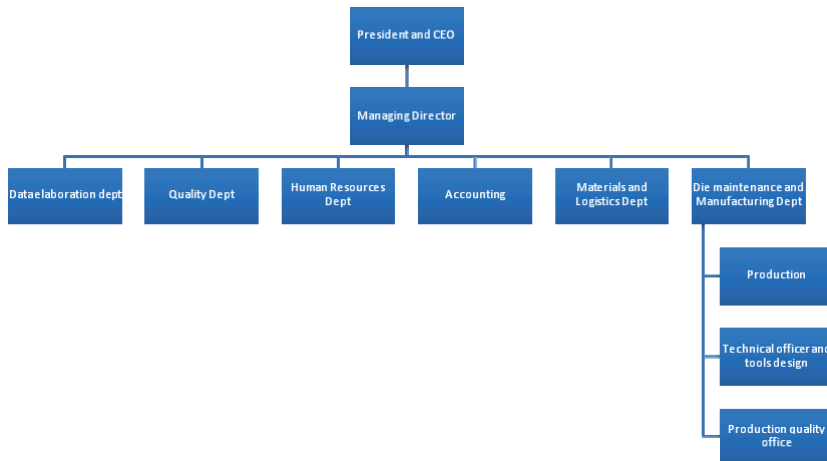


Figure 1. Automotive Components Organizational Chart

Last year, AC Co. generated close to \$15 million in annual revenues and has experienced 15% CAGR in revenues for the past six fiscal years.

The key to the company’s success has been its ability to consistently deliver high precision and quality on complex designs using its process expertise and collaborative relationships. AC Co. has been more successful at executing its value proposition compared to its competitors. With over 50 years of combined experience in the metal forming industry, it is more creative, faster, and efficient at delivering a technical solution, which provides clear value to its customers.

Whenever possible AC Co. utilizes roll-forming¹⁸, as opposed to other competing processes like deep drawn¹⁹ or progressive stamping because it has the ability to produce parts with two to three times tighter tolerances. In addition to meeting necessary product specifications, AC Co. actively participates in the customer’s engineering process to find the best solution in terms of material, dimensions, and features. When combined, these factors provide AC Co. with a unique advantage over its competitors.

Products offering

AC Co. offers four basic processes:

- Roll-forming
- Deep drawn stamping
- Traditional stamping
- Fine blanking²⁰

Utilizing these processes, AC Co. has succeeded in a niche market, producing metal roll-formed housings for

¹⁸ Roll forming is a continuous bending operation in which a long strip of metal (typically coiled steel) is passed through consecutive sets of rolls, or stands, each performing only an incremental part of the bend, until the desired cross-section profile is obtained. Roll forming is ideal for producing parts with long lengths or in large quantities.

¹⁹ Deep drawn stamping allows for flat sheet metal, made of materials aluminium, copper, nickel, steel or a combination of these, to be turned into shapes of a three-dimensional form. Some of the forms that are made possible by this process include cup-like, shell-like, cylindrical, square and rectangular shapes.

²⁰ A type of blanking operation that simultaneously compresses and shears sheet metal in order to reduce the amount of tearing along the edge. Fine blanking produces blanks with edges that are entirely smooth.

electric motors. Housings are the metal casings that hold the static and rotating parts of the electric motor together for the static equilibrium of the motor and to allow torque transmission. Housings are critical components because of the high precision required for the rotating parts to work efficiently. The quality of these housings and the precision of their inner diameter directly effects the life of the motor.

Besides motor- housings the company also produces oil shaft seals and other fineblanking products. A current breakdown of revenues by product line is as follows:

- motor housings 52.5%
- sealing 37.0%
- fineblanking 10.5%

Its roll-formed motor housings are especially unique because the equipment and tool dies used in the process are innovative and proprietary, which helps AC Co. to achieve tighter tolerances on the housing’s inner diameter, a critical need for motor manufacturers. In addition, AC Co. added the “double-clench” technology, which makes the housing water-tight throughout the life of the motor.

The automotive components industry

While AC Co. can produce parts for any industry that uses stamped and roll-formed components, its experience and current operations are best aligned with the automotive market.

The company’s current customers are primarily Tier 1 and 2, multi-national automotive motor manufacturers.

Worldwide, motor customers are generally divided into two categories: large and small. Large companies (e.g. Bosch, Siemens, Valeo, Denso/ASMO, Behr and Johnson Electric) often offer catalogues of motors and refuse to customize or serve end-customers that have low volume applications. Small companies (e.g. General Cab) generally assemble motors for the large companies or design products for low volume applications like the commercial vehicles (CV) market and emerging markets for light vehicles (LV).

Sourcing decisions, relevant to companies like AC Co., are made based on the following factors.

- expertise and ability to produce complex designs
- proximity to both design and operations
- design feedback and collaborative attitude
- quality history and practices
- financial stability and ability to fund surge capacity
- on-time delivery
- Cost

Each customer weights these factors differently, depending on its goals and culture.

The company has established key customer partnerships with a variety of manufacturing organizations around the world including Denso, Johnson Electric, SKF, Federal Mogul and Uchiyama, primarily through their customers’ European divisions.

Customers have granted AC Co. nearly 100% of their precision motor housing orders and are currently working with AC Co. to supply their adjacent low cost regional plants in countries such as Hungary and India.

The North American automotive Market

Since their current customer base is strong, the entrepreneurs feel ready for the next step in organizational growth and are seeking to expand the company’s customer network in the North American (NA) market. Through an in depth market analysis they gathered all the relevant information to decide whether to do this or not.

The NA automotive market is divided into two main sectors – LV and CV. Both classes of vehicles are sub-categorised by size, weight and usage. Every vehicle sold contains a variety of components that could be made by the processes that AC Co. offers; however, the roll-formed housing that AC Co. targets is only applicable to six possible components: the starter motor, blower motor (2 per vehicle), cooling fan motor, ABS motor, and alternator.

The total NA automotive market is estimated to be 21.6 million vehicles within five years, of which 94% represents the LV segment. This equates to 130 million motor housings with six housings per vehicle. Year-on-year vehicle sales have grown at an average of 3% over the past five years and are expected to grow another 1 to 2% per year for the next five years. Based on market research, approximately 30% of the vehicles sold, or 39 million motors, will need high precision motor housings. The commercial vehicles, large and luxury cars, and high-end small and medium cars require precision and value over low price.

Vehicle components, like the starter motor, are typically designed and sold by vehicle platform. Of the 21.6 million vehicles expected within five years, there are approximately 150 major platforms of varying annual volumes open for bid (50 CV and 100 LV). On average, the platform volume, with a lifecycle of approximately three years, is 120,000 vehicles per year, which translates into a potential 60,000 parts per platform per month (10,000 vehicles x 6 units per vehicle). Currently, suppliers are bidding for models that will enter production in two years time.

Market segmentation for the US

It is more advantageous in the automotive industry to segment the market by end-customer usage than by direct customer needs, because it is the end-customer segmentation that will drive product requirements. In addition, Tier 2 and 3 companies like AC Co. must be mindful of the price sensitivity and quality expectations that each sub-segment possesses in order to target the right vehicle programmes.

Standard segmentation for the NA automotive market, is by body style, base price, size and usage. In general, the LV segments include small cars, medium-sized cars, large and luxury cars, sport utility vehicles (SUVs) and light trucks. The CV segments include light-, medium-, and heavy-duty- on-highway trucks, and off-highway vehicles. The graph below summarizes the segments as well as AC Co.’s target segments based on customer needs.



Figure 2. AC Co. target segments

The LV market remains highly consolidated as the top five manufacturers control close to 80% of the total NA market.

- Small cars: this segment represents 12% of the overall market. As fuel prices increase and regulations encourage cleaner burning vehicles, this segment will increase in size. With razor thin margins, this is the most price sensitive segment.
- Medium-sized cars: this segment represents 20% of the overall market. The margin potential in this segment is only slightly better than the small car segment, making it difficult for premium suppliers to command premium prices.
- Large/luxury cars: this segment represents 8% of the overall market. To differentiate their vehicle offerings, OEMs value technology and premium products in this segment. Therefore, suppliers with premium offerings (like AC Co.) have a better chance of winning in this segment.
- SUV/light trucks: this segment represents 54% of the overall market and it has more than doubled in volume since 1991. It is the most profitable of the segments, allowing suppliers more pricing and economies of scale opportunities than the other segments. Higher fuel costs as well as environmental concerns are expected to slow down the growth of the SUV segment over the next five years.

The CV market consists of four major truck manufacturers. This market segment is currently facing a number of emissions regulations challenges, since the government has set milestones every three to five years for new emission level targets. OEMs, therefore, are launching new platform designs every three to five years. For suppliers, this means that they must support nearly every new launch or risk being locked out of new programmes until the next emissions cycle.

- Light -duty on-highway: Buyers are the most cost sensitive in this segment.
- Medium-duty on-highway: Buyers, often fleet owners, are typically more cost sensitive than in the heavy-duty segment and they engage in sophisticated cost analysis prior to purchase.
- Heavy-duty-on-highway: Predominantly purchased by fleet owners who perform advanced cost analysis of total cost and owner-operators who often have brand-loyalty by engine and vehicle OEM, this segment is most concerned with increasing fuel efficiency. Decreasing the weight of the motors can contribute to increasing the fuel efficiency of the truck.
- Off-highway: These vehicles include tractors, farm and construction equipment, marine engines, and power generators. As applications in the field require custom vehicles they are typically low-volume by part number. The benefit of this segment is that purchasers, usually large firms, can afford to pay a premium for this level of customization.

Market Trends

There are ten major trends affecting the size and growth of the NA automotive market, making this a complex and precarious environment to serve.

Pricing Pressure – In a survey conducted by a UBS automotive equity analyst, 75% of supplier executives said that the ‘Big Three’ award business based primarily on lowest price. They also indicated that prices decrease on average 3% annually and are expected to continue falling at about that rate for the next two years. For suppliers whose raw materials typically account for about 50% of their total cost structure with an assumed flat cost curve, this means that productivity must be improved by 6% just to keep profit margins flat. Even when the economy allows the OEMs to improve net pricing and profitability, their relentless pursuit of supplier savings will not abate but will continue to intensify.

Threat of Transplant Production – Transplants are foreign automakers who set-up production facilities in the domestic market. It is critically important for suppliers to penetrate the transplants and dilute exposure to NA OEMs. Transplant production has been growing at a very healthy 13%, compared to rates of $\pm 3\%$. Currently,

most suppliers derive only 10% to 15% of their OE sales from foreign transplant operations, which now comprise 30% of NA LV production.

Globalization of Suppliers – The high cost of producing in NA is causing a trend to scale down production domestically. Between 2000 and 2003, the average annual decline in US production was approximately 2%. For the period 2004 to 2008, the annual decline grew to 2.5%.

Future Inventory Reduction – During last year LV inventory levels remained persistently bloated, despite intermittent production cuts. Inventories continue to rise every year due to the Big Three's consistent loss of overall market share to foreign brands, a mixed economic environment, and OEM's tweaking of sales incentives. Over-capacity is the primary driver of deterioration in the Big Three's already thin profit margins. Inventory levels, and thus production volume are likely to be reduced in the future to return to a more equitable supply and demand position.

High Incentives – High sales incentives continue to be a primary driver supporting OEM unit sales although incentives hurt the OEM's profitability, which ultimately can put more pressure on suppliers. The increase in sales incentives can have a positive effect on suppliers to the extent that they help drive demand and favourably impact on build rates.

Interest Rates and Oil Prices – Consumer spending on automobiles is negatively impacted by higher interest rates and rising gas prices as there is less disposable income. An improvement in the economy could bring lower-end consumers, those most affected by the economic slowdown over the last few years, back into the marketplace for lower-priced cars. Fewer vehicle sales result in less demand for automotive components.

Rising Steel Prices – The price of scrap steel has more than doubled over the past two to three years, which has significantly affected auto suppliers and especially metal benders (like AC Co.). OEMs demand that suppliers absorb the brunt of higher raw material costs unless there is a proceeding participation in a pass-through programme that provides steel on a consignment basis. Another consequence, potentially relevant for AC Co., is a significant increase in the use of conductive, high-precision, temperature-resistant, plastic parts.

Financial Deterioration of OEMs – Moody and Fitch's downgrade of Ford and GM's corporate unsecured bonds from investment grade to 'junk' status will limit both Ford and GM's access to capital markets. The loss in investor confidence in the two largest NA OEMs will put additional pricing pressure on suppliers as Ford and GM find ways to trim costs and improve their working capital.

Foreign Competition – In the LV segment, the 'Japan Three' are quickly becoming market share leaders over the 'Big Three', especially in the larger displacement, high-profit SUV and truck segments. The Korean makers continue to take market share in small and mid-size cars, and the Germans remain strong in the luxury segments. Until the Big Three surpass the style and quality offered by foreign manufacturers, they will continue to cede market share. In the CV market, the industry is experiencing a global consolidation and vertical integration of OEMs, and European automakers (Daimler Chrysler and Volvo) are emerging as the dominant global players.

Emissions Regulations – A trend toward low-emission, fuel-efficient vehicles will continue in the future as the government regulates emissions levels and consumers become increasingly environmentally conscious. Alternate vehicle technologies like hybrid, diesel, and fuel-cell will be introduced into the marketplace to address the new emissions and fuel economy targets.

All of these market trends imply that the NA market is complex in both volume forecasts and purchasing needs (e.g. price and precision). AC Co. must work to manage the differences in trends from its current European market. This can most easily be done by serving a wide breadth of customers, sheltering them from OEM market share shifts.

Potential Costumers

Through primary and secondary research AC. Co. management identified the companies, currently present in the NA market that could potentially be interested in the company’s products.

The table below summirez the value propositon and the purchasing drivers of such firms.

Customers	Value Proposition	Purchising drivers
	Positions and designs its motors to be smaller, lighter, and quieter, while maintaining high performance output	Purchasing decisions are made by considering the global ‘recommended supplier’ list, domestic location of warehouse and/or manufacturing site, quality practices, supplier open-book accounting, and launch risk. ASMO is a division of Denso, but AC Co. must support them as if they were a separate entity
	High technology, robust designs to serve (mainly) North America CV OEMs and after market	Formerly a division of GM, low cost is the main driver, and proximity to its motor plant in San Luis Potosi, Mexico
	Focus is on quality. Headquartered in Auburn Hills, MI, Valeo is seeking to grow its presence in the US market	Quality processes, low costs, advanced technology, and global presence drive the purchasing decisions
	Products for every vehicle with optimum cooling efficiency with the most compact design. Company positions itself as reliable, cost-focused, and innovative	Design collaboration, low cost
	Leverages its corporate heritage and people	Proximity to both design and manufacture to maintain strong people relationships
	Customizes motor designs by customer needs: durability, reduced weight, decreased size, lower cost	Design collaboration to achieve customization at lowest cost

Competition analysis

AC Co. competes with both foreign and domestic competitors whose focus on quality and precision ranges from poor to excellent. There are thousands of companies doing metal stamping and progressive stamping and a few that have developed businesses in roll-formed or comparable technologies that can compete fiercely with AC Co. in both the foreign and domes tic markets. There are many other motor housing suppliers, but they do not have similar value propositions to AC Co. for housing products and roll-forming processes. Many have been in business for years and already maintain a strong presence in the NA market. AC Co. will be most competitive with its roll-formed products because it has the advantages discussed above – high precision, expertise in tool making and manufacturing, successful design collaboration, broad production capabilities, specially designed

tools and equipment, and delivery, cost, and quality that meet industry expectations.

In the NA market, AC Co. has seven main domestic competitors. Out of the hundreds of metal forming manufacturers, only these few specialize in automotive precision metal forming with an emphasis on expertise and quality. Even more relevant is that only one company specializes specifically in motor housings, and has roll-forming process capabilities.

In the areas in which AC Co. will compete, the following purchasing factors are critical to a supplier's decision making process:

- **Expertise and ability to produce complex designs:** All of the competitive companies appear to offer expertise and design innovation including critical 3D modeling and stress analysis capabilities but only two firms, have motor housing expertise like AC Co. The company has an advantage, however, in that it can utilize its unique roll-formed process (for super tight tolerance applications), or its stamping or deep drawn process capabilities (for slightly decreased tolerance requirements). More process options will allow AC Co. to successfully offer the highest precision parts at the lowest relative cost.
- **Proximity to both design and operations:** Each of these competitors is already headquartered in the US, so logistics support can be easily handled in-house. With shorter supply distances, they can keep fewer inventories on their books, reducing overhead costs. These firms also have design engineers within a short plane flight of the customer, making it easier to address design concerns and to collaborate. AC Co. can compete equally with the use of an informed intermediary.
- **Design feedback and collaborative attitude:** With the modeling and simulation capabilities of the competitive firms, there is an opportunity for all of the firms to excel in this area. AC Co. ranks high in this area, so it is likely this perception will continue in NA. The challenge will be communicating this competitive advantage to new customers.
- **Quality history and practices:** Since all of the competitive companies are currently serving NA and Japanese OEMs, it is assumed that they optimize their 6-sigma and Lean Manufacturing tools (Just-In-Time or JIT, Kanban, etc.). AC Co. also uses some of the 6-sigma tools to achieve its high quality, so there is probably competitive parity in this area.
- **Financial stability and ability to fund surge capacity:** All of the competitors have equivalent financial status to AC Co, so there is competitive parity in this area.
- **On-time Delivery:** With the proximity of current domestic manufacturing locations, there is no reason to believe that AC Co. will be any more competitive in this area. With the large intermediary-managed inventory, AC Co. will be at least at parity with its competitors with respect to delivery performance.
- **Cost:** While AC Co. is cost competitive, it is not the low cost leader in this segment. Its cost structure is lower than that of progressive stamping, which has higher variable costs due to higher labour content, but is higher than competitors who are willing to take less margin or have local, highly-automated manufacturing. One area where AC Co. may have an advantage with respect to cost structure is in its willingness to meet customer expectations of revealing all costs and production information. Most American firms are culturally adverse to this 'open-book' policy.

By the end of 2005 John and Albert Loyd were searching for new growth opportunities.

Case 2.4. TEACHING NOTES

This case is intended for analysis at undergraduate and, possibly, final-year degree level. With more in-depth treatment of some of the key thematic areas, it would also be possible to use the case effectively at postgraduate level. The case can be used to analyse the critical variables for business internationalization, particularly those concerning the adequacy of the company's resources and the feasibility of different growth strategies. Discussion and analysis should be focused on the following:

A. Opportunities for AC Co. in the NA. market

- a. **Identification of primary target customer:** Of the potential customers, Denso USA seems to be the ideal initial target customer for AC Co.'s NA expansion. AC Co. already works with Denso through its European division, and the company is a good fit with Denso USA's value proposition. Denso positions itself to have the highest performance, and its Japanese quality standards make it the most reliable motor on the market. In addition to Denso, AC Co. should contact each of the other N.A. customers identified and bid for programmes.. It should take about one or two years for business relationships to develop and for new programme opportunities to arise at these other firms.
- b. **Competitiveness analysis:** AC Co. Seems to have enough competitive advantage to win business in NA. It is equal to or better than the competition in all of the key purchasing factors. AC Co. has unique process technology that can produce tighter tolerances than other metal forming processes at a lower cost. Its expertise specifically in motor housings further improves its competitive position.

B. Proposed strategies to enter the NA market

Among the different entry strategies we will suggest a possible solution for this case, that in our opinion minimizes the risks involved with such investment. The company should establish a two-pronged entrance strategy in NA, focusing on both short-term and long-term options, given the lengthy period for establishing operations and the long car-model life cycle.

c. Short term strategy

- i. **Maintain operations in Italy:** initially operations should be managed in Italy, until the production capacity is saturated. This way AC Co. would significantly reduce its short term investment and would be able to ensure the quality of its supplies.
- ii. **Establish relationship with a US-based logistics partner:** to meet customer expectations for JIT inventory control, logistics, and to control currency risk, AC Co. will have to work with a US-based logistics provider.
- iii. **Grow a network of new customers in NA:** the best way to develop its customer base seems to be by focusing on current European customers with US, Mexico or Canadian divisions. This way AC Co. can avoid cold calling and benefit from its established track record.

d. Long term strategy

- i. **Launch a new US production site to serve NA customers:** this decision should be based on the market response that AC Co.'s products receive. It would help the company to consolidate its position in the market and reduce its operating cost.
- ii. **Expand within NA by offering other AC Co. products:** While an expert in the automotive market, AC Co. may also want to look at additional markets, which require high-precision components such as aerospace and other industries which require housings for motors (e.g. domestic appliances).

Case 2.5. Financial services Co.

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Abstract: Albert had been developing financial software solutions for two decades and during the last two years he had been managing, together with his brother Phill and their associate Steven, the company they founded. They were all very proud of their little ‘baby’ and were wondering if their business was ready to enter new markets and expand their customer base abroad.

Keywords: *Internationalization of new ventures, opportunity identification.*

Note: This case study was written for the purpose of stimulating learning and discussion. The authors compiled it in November 2010. The individuals, events and difficulties referred to are real, but have been disguised for reasons of privacy.

Company background

The company was founded in 2004 in Italy to provide software solutions to the financial services industry. Their sole commercialized product was developed to address the growing issue of data management – how to store, reconcile, and report large amounts of data from a diverse set of sources. Aimed at firms managing a large volume of data from multiple sources, the program integrates and normalizes data from dozens of sources, including legacy systems, Excel spreadsheets, Access databases, and Bloomberg terminals, into a virtual database. The software can then be used in a number of diverse applications, including data quality, data reconciliation, auditing and regulatory compliance and reporting. The product’s capabilities can be described as ‘Get, compare, report.’ It is a highly customizable software engine for business information management. For each customer, the software is sold as a ‘solution’ to a specific problem. Once the product has been purchased, the company’s consultants develop a set of rules packages for a customer’s needs. These rules packages are able to automate a company’s information-management processes, eliminate labour-intensive tasks and save time. Overall, software licenses, rules packages, consulting services, and on-going support contribute to the company’s turnover as follows: 35% of revenue derives from the sale of licenses, while 65% from consulting services and rules package development.

Industry Overview

In recent years, the amount of data which an industry needs to manage has grown tremendously. For data-intense industries, this has led to a need for tools that automate the processes for aggregation and reconciliation of data. In particular, the financial services industry has felt this impact and has been investing in solutions specifically designed to address their data management needs. However, investments in such technologies have been significantly reduced, particularly in the US, due to the recent financial crisis.

There are several solutions to these data management problems in the data quality, data reconciliation, and business intelligence markets. Data quality tools maintain the quality of an organization’s data; data integration tools create a means for accessing an enterprise’s spectrum of data from one source; and business intelligence tools enrich data so that businesses can make better decisions. All of these markets are currently experiencing growth, and expect to continue to show growth rates of 18%, 17%, and 10% respectively.

The company’s competitors in these markets can be classified into two categories: direct and indirect. Direct competitors are all in the data quality market. None of these vendors currently holds a significant market share.

There are also vendors in the data integration, data reporting, and data auditing markets that compete indirectly with the additional features that the company provides.

Market Strategy

The company's executives are the sole sales force. This has proved effective due to their strong reputation and the relationships they have with financial industry executives in Italy.

The majority of the sales process is done in partnership with the customer's Information Technology department. Demonstrations by these teams have been very effective, leading to several customers requesting additional capabilities for their implementations. The company's main product is currently marketed as an "all-in-one" solution. However, as the financial services industry continues to grow and become more fragmented, and as firms need more customized solutions, this message causes confusion for potential customers. This was confirmed through our primary research interviews, which showed that potential customers, partners, and industry experts were unclear as to which market Financial Services Co. served and what benefits its products provided for any specific market.

Summary of the situation

Since Albert and his partners wanted to foster the company's growth in foreign markets they engaged a consultancy firm which had to first understand the viability of Financial Services Co. entering the US market and then possibly expanding into other European countries.

In order to obtain the necessary information, the consultancy company that Albert had chosen to do the job carried out 120 primary interviews and sent an enterprise data management survey to 600 targeted financial services executives. The key findings that the consultancy firm obtained through their research can be summarized as follows:

Need for data quality solutions: the need for a data quality tool becomes critical when organizations reach a certain size. Smaller firms (less than 20 employees) do not have enough data or transactions to require an automated solution. However, as organizations grow, there is a point where the volume of data becomes too great to manage manually.

Constrained IT budgets: although there was a need for data quality solutions, the overwhelming majority of interviewees stated that their IT budgets had been affected by the recent financial crisis.

Competitive landscape: customers stated that the financial services software field was a very competitive environment. The industry is crowded, especially in the US in order to enter, a company would have to have a clear value proposition for a market niche.

With this information Albert and his partners had to analyse how to ensure the company's growth without putting its existence at stake. They had identified four potential growth strategies, each one with different risks and potential revenues:

- Option 1: Expand existing niche in current market
- Option 2: Expand existing niche in new market(s)
- Option 3: Expand to new niche in current market
- Option 4: Expand to new niches in new market(s)

Albert was not sure what was the best strategy for his company, nor if they could pursue any of these strategies given their limited resources. He was no longer sure whether the company was ready to grow or if major changes would have to be made to ensure successful implementation of the growth strategy.

Case 2.5. TEACHING NOTES

This case is intended for analysis at undergraduate and, possibly, final-year degree level. However, with more in-depth treatment of some of the key thematic areas, it would be possible to use the case effectively at postgraduate level.

The case can be used to analyse the critical variables for business internationalization, particularly those concerning the adequacy of a company's resources and the feasibility of different growth strategies.

Discussion and analysis should be focused on the following:

- (A) **Marketing and sales strategy:** Financial Services Co.'s sales method has been successful to date. However, the current reliance on relationship-based sales is not scalable. The company lacks the internal resources needed to support a larger internal effort of lead generation and direct sales. With international competition hotting up, the company must act quickly to optimally deploy its limited resources. It should create a Marketing function, enhance the product pricing structure and review its product positioning.
- (B) **Analysis of different growth options:**

- a. Option 1: Expand the existing niche in the current market

With limited resources, the best option is to expand sales channels through partnerships with larger firms that already sell to the company's targeted market (the financial sector). These firms would have existing relationships with the ideal clients and can bring credibility to the sale. Remaining within Italy would allow Financial Services Co. to easily support these partners.

- b. Option 2: Expand the existing niche in new market(s)

In the absence of a well-financed marketing campaign or strong brand recognition, referenceable customers are key to a company's continued success. Therefore, actively pursuing new niches in new markets would be risky, and is not recommended. Even if a partnering opportunity were to present itself unsolicited, there would be a danger of expending limited resources on a speculative venture.

It makes sense to consider expanding to other regions and given the company's limited resources, expansion of this kind is best suited to partnering through a value-added reseller (VAR). Customers in a new geographical location will appreciate, if not require, a local presence. An existing local partner will also have relationships in the target niche.

- c. Option 3: Expand to a new niche in the current market

This option would be taken through partnering opportunities. Partnerships with other established firms present an opportunity to explore other niches on an opportunistic basis. Should these partner firms determine that some of their customers in other niches might find the company's product useful, they would be free to explore those opportunities upon properly notifying the company's management. The exploration of such opportunities by Financial Services Co. team itself would however be too distracting. Any expenditure on hiring experts in other niches would also be risky. It is far better to let the partner bear the majority of the risk.

- d. Option 4: Expand to new niches in new markets.

This option is inadvisable at this time. The company should first consolidate its position.

Case 2.6. Engino - Play to invent™

www.enginotoys.com



Panikkos Poutziouris, CIIM and Manchester Business School

Skevos Evripidou, University of Cyprus

Milena Marinova, University of Cyprus

Abstract: This case study illustrates the engineering of the innovation champion in Cyprus that is now progressing through the stages of small business development. Engino Ltd is the brainchild of Costas Sisamos, an ex-teacher, whose passion for the design of a technological model for learning has been *primus operandi* for the launch of this startup, inspired by creativity, which is now growing beyond national frontiers. Engino is perhaps one of the few toy products that originated directly from the educational system and has turned into a business, pursuing alternative growth strategies: new product/market development in the local market via the forward vertical integration; new market development via focused export development; and ongoing alliances with overseas agents in over 20 countries.

From idea to innovation and entrepreneurialism

The idea came from the founder of the business, Costas Sisamos, a mechanical engineer and former Design and Technology teacher, who, having spotted the lack of appropriate construction kits for school children in Cyprus, became hooked on the mission to build a toy that can offer a joyful experience of learning about engineering. Knowledge from fields outside engineering (e.g. pedagogy) had to be combined so that the optimum design could be achieved.

He has invented the Engino Toy System, which is a three dimensional construction toy, offering unique creative opportunities for both children and adults alike. Through creative play, children learn how to exploit the power of rearranging the materials and the forces of nature, i.e. they master the art of engineering. In fact, the resulting design was so impressive that it sparked the fuse for more innovative thinking. It became a company's vision to soon incorporate more engineering concepts, such as control systems and electronics, making Engino one of the foremost leaders in the educational toy market.

Engino.net Ltd -the company exclusively managing the Engino System- was founded in 2004 by the inventor, Costas Sisamos, with the vision of successfully penetrating the €50 billion toy market. All shares belong to the founder, whose combined experience in mechanical engineering, manufacturing and education has led to the design of the patented Engino Systems (patents are listed in Appendix A).

Despite the difficulties associated with the development of a new product in Cyprus, the awards and recognition the initial idea received, such as third position in the 2005 Cyprus Entrepreneurship Competition, organised by the University of Cyprus and its partners (the Ministry of Commerce and Industry, Cyprus Research Foundation, Cyprus Development, Cyprus Chambers of Commerce and Industry, CIIM Business School) gave the founding team the stimulus to continue with their entrepreneurial odyssey.

In 2005, the company won a research grant from the Institute for Research Promotion that supported it financially during the next development phase until 2007, when the first Engino toy kits went to the market. From the start, Costas has been looking to promote the Engino Toy System both locally and across global niches.

The technological innovation edge

The Engino range started with the 60 models along with 4 small sets. The firm unfolded its growth plans and developed a full educational range to cover the topics of mechanisms, gears, pulleys etc.

Engino Construction System is a tremendously versatile product. It comprises of two distinct products; the Toy System and the Wood Connector System. The Toy System is intended to fulfill the needs of the retail and educational toy market while the Wood Connector System is designed for use in schools, specifically targeting the needs of Design and Technology which is taught at almost all levels of education. The components of the two systems are fully compatible, making Engino the first hybrid toy system in the world.

Engino Toy System consists of 17 structural components and 18 mechanical components that snap-fit to create three dimensional frame models of engineering devices and structures. The patent pending design of the male-female connection allows simultaneous connectivity on all sides of the components. This feature alone enables children from 5+ to build simple or complex models quickly and easily using a very low number of different components and a much lower quantity of parts. This feature also ensures high manufacturability, lowering significantly the cost of production giving Engino.Net Ltd a competitive edge. The packages are not restricted to offering just 2 or 3 models like most conventional building systems, but go further to offer the maximum creative experience. Following the same design principles of the basic system, a range of different type of gears, pulleys, axles and accessories now complements Engino Toy System making it the ideal constructional toy for home or school. Cars, cranes, motorcycles, planes, bridges...anything is possible with this amazing building system.

Engino Toy System offers several advantages which differentiate it from other competitive products: the major advantages are:

- the system is expandable at any time, in any direction, at any angle;
- rods are also connectors;
- all parts snap-fit and stay together;
- the expandable rods allow any triangular shape to be created making variable length possible;
- the bigger size of the parts will help the children build 'big and easy';
- user defined complexity makes it appropriate for children aged 5 to 14+;
- may be used both as an educational supplement and a toy.
- all assembled components have flush surfaces and thus may be covered completely by materials such as cardboard or fabric.
- Fewer components can build more models

The products have gone through a series of transformations in the last two years and in 2009 a new series was launched based on the market feedback for optimized sales.

Product Development

The Engineering series includes sets that allow many models to be created; there are sets with 5, 10, 20, 30, 50 and 80 models, all of which include a motor, (with the exception of the 5 model set). In 2010 the Mechanical Science series with 8 sets was introduced, this time incorporating educational books with activities and experiments. This new range is already very successful and has started selling in large volumes in the US. In 2011 nine new sets will be introduced, expanding the previous ranges and adding two new ones, the Solar Power series which has elements with remote control functions and the Mega Structures series. Another range that is planned to be launched in 2012 is Cuboids, a building system consisting of large connectable cubes with the snap-fit Engino geometry on all sides. This innovative product will enable Engino to penetrate the much larger market of children in the 2-5 age range. Furthermore, in 2012 the company aims to launch a robotics module which will target the higher levels of education.

The Engino Wood Connector System presents a completely new building concept for design and technology education, as it is the intermediate step between frame building using contemporary tools with consumable materials and using commercially available construction kits. The Wood Connector System offers a solution to one of the most serious problems faced by technological education; that of constructing effortlessly, rigidly and accurately three dimensional frames to which mechanisms and other electromechanical components may be added. In schools, 'design and make' activities are supposed to provide pupils with the means to creatively explore technological and scientific concepts while enhancing their problem solving skills. In most educational systems consumable wooden rods are the most common framing material but various practical problems arise in their use such as:

- the frames constructed are non-rigid and inaccurate ;
- valuable time is wasted that could be used for creative and investigative work;
- dangerous tools (hot glue, staple guns, nails, etc) are used;
- the constructions made are permanent and cannot be modified or expanded.

These problems are solved by the use of ready made construction sets and in fact, highly developed countries allocate a large portion of their budget just for these purchases. However, pupils are restricted solely to the components available and whatever they create has to be left in school and later on is disassembled in order for other models to be built. Besides, the cost of these sets is quite high and it is rare to find classrooms with enough sets for all children to experiment with. Furthermore, if a few components are lost the entire set becomes dysfunctional and possibly useless. The Engino Wood Connector System is a stand-alone consumable or investigative product and solves most of the problems associated with wooden frame building and construction sets. It is also fully compatible with the Toy System and may be combined with all Engino construction sets leading to endless 'hybrid' constructions. In 2009 a retail set was launched including the wood connectors, precut wooden dowels and Engino parts, and received the 'Best Vacation Toy' award from Dr. Toy in the US.

At the moment there are several Engino construction sets available, some of which are specifically oriented to classroom activities prepared by the Education Department of the University of Cyprus and the Cyprus Primary School Teachers Association. Current R&D funded programmes are looking into the development of more components and more complex electromechanical features all the way up to wireless robotics. Engino Systems include booklets that not only provide the child with instructions on how to complete the construction, but also have directions on how to experiment and discover knowledge in engineering, mathematics, science and other

subjects. These booklets also have general information referring to a particular construction's mechanisms and uses.

A small venture aiming at global market niches

Engino Ltd. is widely regarded as one of the innovation stars in Cyprus. Even though the company's first product was only launched in late 2006, it has already won numerous national and international awards and it is now recognized as one of the most innovative and creative construction toys in the world. Some of the major awards and achievements are listed in Appendix B. The simple fact that in a few years of operation the toys have received so many awards, proves that Engino is a brand for the future. Engino is not only a creative toy for young inventors, it is also an educational support toolkit used in both primary and secondary schools. The Ministry of Education in Cyprus incorporated the Engino educational range in all schools and many schools in the UK have started using Engino in their D&T workshops.

Engino produces toys at different retail price ranges, starting from as low as €13, for simple, yet interesting, constructions that complement each other, have add-ons and can be converted at any time to more complex models.

The target customer group, besides schools of all levels, is both boys and girls aged 5 to 14, although boys traditionally seem to be more inclined to play with construction toys than girls. With the new products planned in 2012, this will expand to cover ages 2-18. Out of this vast market of 1.7 billion children, Engino's products are aimed at children coming from highly developed countries, particularly the EU and North America, where the yearly expenditure on toys averages €190 per child

The management team

Engino Ltd. is a small company with six employees (5 full-time and one part-time) that cover all company activities like the design of 2D and 3D parts, tools, packaging, and writing the instruction manuals and educational books. The founder and owner-manager, Costas Sisamos, a true multi-skinner, is the C.E.O and is also in charge of R&D, technology design, production, marketing and exports. Administration, finance, logistics and local sales are run by Kleanthis Zisimos, a finance degree holder who has been with the company from the very beginning. There is also a graphic designer, responsible for the package design and artwork, a teacher (a physicist), working on the development of models and teaching manuals and a mechanical engineer in charge of developing the instruction manual for the 3D model assembly. An accountant is employed on a part-time basis. , As the resource base expands, the management team is planning to set up a sales and marketing department, but is still in search of a suitable person to fill the position.

The financial barriers – the equity gap

The financing of the start up phase involved an €80,000 equity injection by the founder. Following this seed-corn capital, the business received another €130,000 (£80,000) from IPE (Cyprus Research Foundation) and additional support from the University of Cyprus as an award winner for Entrepreneurship. During this gestation period, the firm received another €175,000 (£110) from the incubator scheme.

At that stage, the founder and his team, in the spirit of bootstrapping, only draw very small salaries, thus ensuring sufficient capital to finance operations. It is axiomatic that the firm could bring in long-term loan financing due to its business and financial model. The equity gap did hamper the growth of the firm.

Once the product had been released and was generating revenue, this cash flow was invested in product development, which was further supported by R&D grants. So far, all profits from more than €1.5 million sales

have been reinvested in the company. Moreover, the founder has personally provided another loan (€180,000) to further invest in the fledgling company. The reason it took Engino six years to have an adequate range of products, is because the firm did not get an investor to provide risk capital. Thus, the product development programme, that required millions of Euro, was moving slowly; capital was invested in R&D as it was generated from sales and, of course, from the additional commitment of the founder.

The evolving business model and growth strategies

Engino Toy System is now considered one of the most advanced 3D construction toy in the market. The business model thrives, based on creativity, research and versatility.

The Engino team designs and out-sources the production of their system to bespoke manufacturers overseas. In addition, the firm has introduced into the value chain, a packaging and logistics firm that can process and serve orders from overseas clients. This smart business model allows the firm to be efficient and more profitable, thus, providing the free cash flow to be invested in a new generation of toy systems and in the development of new routes to the market.

The award-winning Engino Toy System is now available globally and ready to challenge the next generation of young inventors. The company has already managed to attract significant R&D capital from government resources, but the positive feedback from potential customers worldwide has created the need for a more aggressive marketing strategy that requires the inflow of further capital which will establish Engino.net Ltd as a global player in the field.

At present, Engino exports, through its distributors, to more than 20 countries and is growing rapidly to become one of the leading construction toy brands. Points of sales include: major department stores, supermarkets and toy stores in Cyprus, an e-catalogue, an online shop (this serves mainly as an image-maker as the postage from Cyprus is very expensive), Amazon.com, distributors in the Czech Republic, Norway, Greece, France, Romania, Korea, Poland, South Africa, USA, Brazil, Russia, Taiwan, the UK, the Netherlands, Germany and other countries, as well as two recently opened RMUs in Virginia, USA.

In May 2009, the first specialized store opened as a pilot franchise with huge success at a new mall in Limassol. The Engino Smart Play Stores feature all the Engino range along with impressive display models like a 3 metre tall Eiffel Tower and a huge motorized booster ride. The store also includes other 'smart' selections of science and discovery toys and the latest teen gadgets. A second store was opened in a mall in the capital Nicosia, but this was not hugely successful in terms of sales due to the seasonality of toy sales and the huge cost of running shops in malls. For this reason the Engino concept will continue to be expanded through distributors.

Horizons of Growth

The firm is now embarking on growth, building its proprietary designs (vital intangible assets) and a brand which appeals to the market. The next step could be to expand the range to cover more ages (2-6 year-olds and robotics for 14+) as well as more technologies (solar energy, radio control, etc.). The Engino team has been analyzing their business performance parameters and market demographics with a view to defining their core client base.

It is clear that Engino Toy System is a premier quality product that is appealing to the higher end of the market niche. The firm's key competitive market differentiator is their unique technology that inspires both children and adults. It is imperative that they identify their loyal clients and explore how they can offer them, according to

Liabotis(2007), high impact value propositions, perhaps via the engineering of more customized products and services.

This loyal client will offer the firm a stable revenue stream which is vital at this phase of the business growth cycle. Building customer relationships will inform the business as to additional future marketing directions and tactics. The core market can be targeted via a more standard–economical version that can appeal to the quality versus price-sensitive customers.

Today, as Engino consolidates in the market, it is embarking on the configuration of its business model and the building of routes to the market by trading their own and other adjacent products that could widen the offering of their shops and their e-catalogue.

References:

LIABOTIS, B. 2007. Three strategies for achieving and sustaining growth, *Ivey Business Journal*, [July/August 2007](#).

APPENDIX A: IPRs, patents and trade marks

- two Cyprus patents (CY2490 & CY2532),
- international patent application number PCT/CY2004/000005 for the ‘Advanced modular connector system for making 3-D frames’,
- a US patent application for ‘Snap fit toy components’ (US11/307,229),
- PCT application that was filed in February 2007 with number PCT/CY2007/000001.
- 17 community designs (000675061-0001 to 17) have also been registered in the EU and already effectively protect the most important parts of the Engino System independent of the patent registration procedures.

In addition the Engino logo has been registered as a trademark in EU and the US. In April 2010, the design patent in the US was officially issued.

APPENDIX B: AWARDS

- Dr. Toy (www.drtoy.com) awards: in the top 10 for Best Active Toy, 2006 (60 model set); in the top10 for Best Educational Toy, 2007 (Simple and Complex Machines); in the top 10 for Best Active Toy (40 model set: Structures); in the top 100 for Best Children’s Product, 2006, 2007, and 2008; the Best Vacation Toy, 2009 (80 model Engineering set); Best Vacation Toy, 2009 (Wood Series Megaset).
- In the top 7 construction toys www.about.com
- Selected by Nuremberg Toy Museum (Germany) for the main display window
- Best Cyprus Enterprise in European Union, 2008
- Nomination for Best New Product of 2008 by InBusiness magazine (Cyprus)
- Nomination for Best Company of 2008 by InBusiness magazine.(Cyprus)
- Winner of the Cyprus Innovation Award, 2008 by the Cyprus Industrialist Association and its partners.

Case 2.7. Consultancy services in the field of education: The case of “Cambridge Studies Ltd.”

By **Lucía Dobarro Delgado** (Department of International Networks of Innovation and Projects, Instituto Tecnológico de Canarias S.A. ldobarro@itccanarias.org)

Summary: The case of Cambridge Studies Ltd. describes the experience of an entrepreneur in the field of consultancy in the context of education and mobility. This case is oriented towards the identification of opportunities and decision taking by entrepreneurs in an international context.

Introduction: Alfonso is a person who has had a clear entrepreneurial orientation since a young age. During his university studies in law at the University of La Laguna (Spain), between 1997 and 2002, he carried out a number of placements with mobility programmes for students, such as an Erasmus grant at the University of Turin or Seneca at the University of Las Palmas. These stays enabled Alfonso to have a more international vision and reinforced his entrepreneurial orientation with activities such as the start up of an events website for international students in Turin with other colleagues.

In 2002, once he had finished his university studies, Alfonso had the opportunity to go to Cambridge in the summer, again working on the organisation of events for students. What initially was to have been a summer stay only became the beginning of his international entrepreneurial career. Between 2003 and 2005, Alfonso carried out studies at the universities of Anglia Ruskin and the University of Cambridge, where his academic training as an entrepreneur began, which he combined with some sporadic pieces of work.

In 2005, Alfonso intended to return to the Canary Islands as the job opportunities on the islands were good. However, the possibility arose of a grant to work on law and European Integration with Anglia Ruskin University, which delayed his return. Alfonso was moving in an ambience of students of different nationalities, and indeed became the first non-British representative at the university for international students. At the same time he became a member of the entrepreneurs’ club, CUTEC²¹, organizing events taking students to London, and he achieved the role of Marketing Vice-President for the coordination of the organisation of events for entrepreneurs and for the university.

First steps as a self-employed person: It was in 2006 that *Cambridge Studies* was created with himself as a sole trader. At the same time, Alfonso began to collaborate as an external collaborator with NEC Philips on the development of web sites and three months later he was hired as the coordinator of digital marketing.

Up to this moment, Alfonso had shown a clear entrepreneurial initiative, with key aspects such as:

- Interest and initiative for creating new things.
- Detecting unsatisfied demand, following his intuition and wanting to work.

²¹ CUTEC: Cambridge University Technology and Enterprise Club <http://cutec.org/>

Some examples of these initiatives were the creation of the water polo and swimming clubs at the University of Anglia Ruskin and the offer and organisation of trips for students at Cambridge, initiatives which had not existed hitherto. However, in many of these initiatives, Alfonso reached a point at which he could not grow any more and so he changed activity.

Since 2006, Alfonso has continued to combine his work at NEC Philips with his activities as a self-employed man at Cambridge Studies, until in 2009 he received an offer from the company of a position involving greater responsibility as the linking point for digital marketing between the United Kingdom, Spain and Italy. Alfonso again rethought his future *“with this position I have little chance of returning to Spain, perhaps to Madrid but not to the Canary Islands, and I will always be working for other people. Should I continue at NEC Philips? Return to the Canaries? But in 2009 the situation in the Canary Islands is worse due to the crisis... Is it necessary to make a change?”*

It is in this context that he considered the step from being self-employed to having a company such as Cambridge Studies Ltd. His main reasons were:

- 1) In order to be able to return to the Canary Islands in the medium to long term.
- 2) So as not to always work for others, to be his own boss.
- 3) As a self-employed person he had increased the workload and he required the growth of the company so as to be able to carry out the activity successfully.
- 4) The possibility of working with a recent Spanish graduate who was looking for a company in which to gain work experience in Cambridge.

The company: Cambridge Studies Ltd was created in 2009 in 24 hours. Alfonso continued working part time at NEC Philips while little by little linking himself more closely to his own company.

At first, Cambridge Studies Ltd began in his sitting-room and after three months it opened an office in a business park facing the University. Alfonso became an agent of Anglia Ruskin University, now not only with leisure activities in the summer but in order to bring in foreign students to study in Cambridge (postgraduate or doctoral studies...) and he made agreements with foreign universities. The company took on new employees, mostly students on work experience or volunteers doing their first job, and he subcontracted specific areas to external collaborators. This strategy allowed the company, which did not yet have its own capital in order to be able to hire employees, to have motivated and qualified staff.

At the end of 2009, Alfonso left NEC Philips, although he continued to work for them on specific collaborations, and became self-employed again, so as to devote himself to his company 100%. But the scene changed at the beginning of 2010. The crisis meant that the influx of students and the incentives from the university for recruiting foreign students were reduced, and the idea of returning to the Canary Islands came to the forefront. Alfonso rethought his business activity and began to have some contacts with the Canary Islands, with the idea of offering bridging services between the Canary Islands and

Cambridge in matters related with mobility and business creation, such as commercial missions, and he began a number of collaborations with the FEULL and the ITC.

In his first year of business activity, Alfonso has been conscious that training as an entrepreneur is a different matter from being a businessman. There are certain aspects that one only learns by doing things in practice which are not written in any manual. The management of human resources, how to gain access to funding and maintaining liquidity, factoring in the medium term ... identifying the following as key factors for survival of the company:

- 1) Very low costs.
- 2) Adaptability.
- 3) Being able to have an overdraft.
- 4) Motivated employees.

During 2010, the workload continued to increase with the Canary Islands and to decrease with students, until in February 2011, he decided to return to the Canary Islands and set up his office there.

Questions for reflection:

- **Aspects related with the change of geographical location.** The company has undergone a change of location from Cambridge to the Canaries. How should the change be made? Reflection on questions about whether it is better to be a company or to be self-employed, about opening a branch of the English company in the Canary Islands or opening a new company. Positive and negative aspects of keeping the company name and possible alternatives.
- **Diversification.** The company had concentrated its services on students and was restructured to serve entrepreneurs and commercial missions for small companies. What kind of services could its promoter offer as a differentiating element and bearing in mind his network of contacts and experience?

Management of human resources. The model followed by Cambridge Studies Ltd. involves having teams for an average of five months and with a high rotation. How can you avoid the brain drain without having established a fixed income?

CHAPTER 3. INNOVATIVE DEVELOPMENT

- 3.1. Wowsystems Informática Lda (CEIM – BIC Madeira)
- 3.2. Tomorrow Options (CEIM – BIC Madeira)
- 3.3. Made in Local (FEULL)
- 3.4. Oikos Energy Services (FEULL)
- 3.5. Subbabel (FULP)
- 3.6. Mobilife Technologies (FULP)
- 3.7. Augmented Reality (POLITO)
- 3.8. Building mixtures Ltd (RUSE)
- 3.9. How to develop, manufacture and market a technology product in an outlying European region: The case of “Dobontech” (ITC)
- 3.10. Genesis Pharma: The development of an Entrepreneurial Giant (CYU)
- 3.11. In the horizon of authenticity: Oleastro Enterprises Ltd. (CYU)

Case 3.1. Wow! Systems – From Madeira to the world...

Carolina Malheiro, CEIM – BIC Madeira

Wow!Systems²² is a high-tech start up with a focus on creating paradigms of interaction and interactive technologies, i.e., interactive multimedia solutions.

According to the founders of the company: *'we deliver experiences that really make people go "Wow!" by applying novel interaction techniques to areas such as tourism, entertainment, advertising, education and culture. We combine industrial experience, creativity and hard work. Wow! offers expertise in developing mobile applications for several platforms... (We) also deliver web-based solutions ...[and] other services including the development of interactive surfaces, from magic floors to gesture controlled projections or multitouch screens.'*



Figure 1 – WOW !Systems

The entrepreneurs' background

This is a family business project that was born in 2008 when the two Campos brothers, Ana Marta (a biological engineering graduate) and Fernando Miguel (a law graduate), saw an area with an attractive market opportunity, although it was an area in which neither had a career path.

They became aware that at that time there was a lack of companies offering people access to new and modern content and digital technologies, whether they were consumers of a product, visitors to museums, or tourists.

Today Miguel Campos manages the enterprise and considers that *'although I have a professional lawyer's license, I believe that the personal fulfilment from being an entrepreneur is incomparably superior. Creating something from scratch and seeing the development of an idea can be more rewarding than any other type of work.'*

He has been the coordinator of all R&D projects carried out by the company, making the link between the company's technicians and any customer or national/international partner. Examples of this are the installation of a "Wow!Floor" at the World Expo in Zaragoza, and the installation of an interactive display in the Regional exposition 'Cultural Tourism' which was inaugurated by the President of the Portuguese Republic – Anibal Cavaco Silva.

²² WOW!Systems: wowsystems.pt

Since the beginning of the project both entrepreneurs have had the help of their older brother - Professor Pedro Campos - who currently teaches and is part of the research team of Madeira University (UMa)²³ Department of Engineering and Mathematics. He is the link person to that Institution and the scientific consultant for WOW! The company started with a pilot project mounted in Porto Moniz Living Science Centre (run by the Northern Development Society of Madeira) where they were in charge of the entire interactive technological infrastructure (technology-based sensors and intuitive physical interfaces) with the main goal of changing the way visitors interacted with digital content.

The project - Innovative by nature

According to Miguel Campos the company can be considered a spin-off since *“the idea was born from a set of master's theses held at the University of Madeira. The technology already existed and comes from a set market-oriented research projects over the past 3 years, in the area of human-computer interaction. We noted that these ideas had great market potential and that there was human capital with enough talent to pass from the academic level to the real world. So we decided to create WOW!”*

Thus, the entrepreneurs see this close link with the local University as *“a strength that will allow resources to be allocated more quickly and securely.”*

Moreover, there was, and still is, a growing stake in the area of ‘human-machine Interaction’ in the Madeira Autonomous Region, mainly due to the Carnegie Mellon University (CMU) programme²⁴ that began in 2007 as the result of a partnership made between CMU, UMa and the Madeira Tecnopolo²⁵ (the local science park). This mainly concerns the design, evaluation and implementation of interactive electronic systems focused on the relationship between humans and technology.

In addition to the potential of the project, the people that work at WOW! are young, creative, motivated, highly qualified, and have specific training in human-machine interfaces.

The innovative nature of this project is demonstrated by the type of product and services that they offer. The company is aiming to provide *“original solutions and flexible interactive installations, interactive three-dimensional objects and films through a differentiated service based on technology developed internally.”*

Currently WOW! is working with a range of products and in different fields: culture, education, advertising, tourism, environment and public administration. The services provided by company are:

- Design of interactive installations for promotional stands, environmental and tourist centres, science parks or entertainment, with interactivity and surprise as key elements;
- Design and production of interactive multimedia software with tracking of movement that can be integrated into any indoor or outdoor big screen;
- Design and production of interactive stereoscopic 3D movies, making use of advanced multimedia equipment as augmented reality (3D), holograms or fogscreens;
- Development and design of applications for the most popular mobile platforms (iPhone, Blackberry, Google Android)
- Development and design of Web-based applications using Flash technologies, Flex, PHP, MySQL, Java, etc.

²³ Madeira University: www.uma.pt

²⁴ Cornege Mellon University Program: www.cmuportugal.org

²⁵ Madeira Tecnopolo: www.madeiratecnopolo.pt

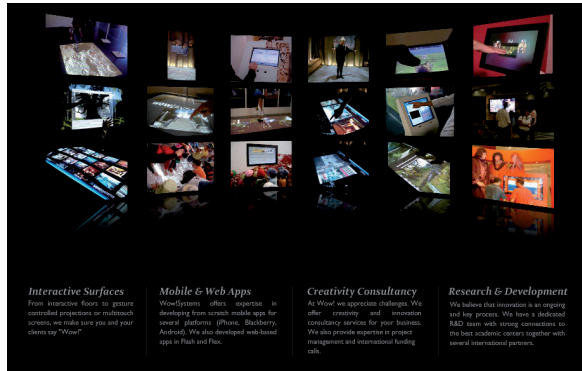


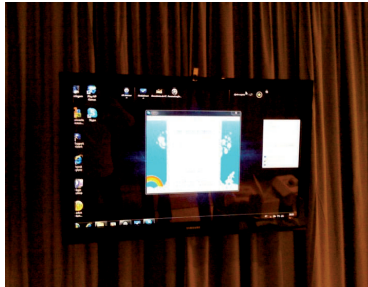
Figure 2 – WOW !Systems Products and Services

Moreover at very competitive prices they ensure that each solution offered to the client is original, unique and personalized, and can “*focus the attention of the user on what really matters - the scientific or educational content.*”

The EMPREENDINOV – financial support to innovation and entrepreneurship

Given the high level of innovation, largely due to the strong link with Madeira University Research Department and to the first-movers advantage in the regional market, Wow!Systems obtained financial support from the EC Regional Fund – Empreendinov (2007-20013) - which targets entrepreneurship and innovation and operates within QREN (the national strategic framework for implementation of the funds allocated in Portugal by the European Union).²⁶

Thanks to this support, WOW!Systems established an office in Funchal, which acts as a showroom for the company and allows them to demonstrate interactively a sample of all kinds of gadgets and technologies that are produced and sold, and to perform tests and evaluations of interactive solutions capable of illustrating the ‘WOW!’ effect. It is “*an open space where anyone can interact with our products and solutions.*”



Figures 3 & 4. WOW! Systems Showroom

²⁶ Empreendinov aims to contribute to the change and growth of the Regional economy, by encouraging the emergence of new entrepreneurs and the creation of new enterprises, that can contribute to the diversification and competitiveness of local businesses, through investments leading to the introduction of new products, new technological processes, new distribution techniques, marketing, information and communication, technical innovation, energy rationalization and environmental management, among other factors of economic competitiveness. More information: www.ideram.pt

From Madeira to the World - Internationalization strategy

An important issue for the future of the company is how to ensure its competitiveness in the regional and national markets, as well as how to internationalise the business. At the moment, WOW! is selling to the national market, as well as to Italy and Great Britain.



Figure 5 – Examples of Projects in the National Market

Thus, considering the advantages stemming from globalisation and the current trends in the development of information and communication technologies, international expansion is seen as an opportunity for WOW! to proactively explore new markets. In 2008, WOW! Systems had its first experience of internationalisation when it participated in the Zaragoza World Expo with the installation of an interactive floor.

Furthermore, as a technology-based company, the issue of globalization is no longer an option but has become a matter of survival. For that reason, WOW! currently has customers scattered throughout the world, as the image below illustrates.

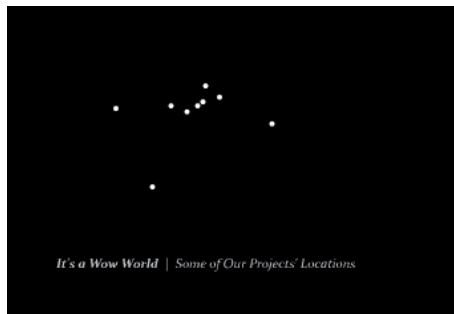


Figure 6 – WOW! Systems' global activity

As part of its strategy of internationalization, in addition to targeting international customers, the company has also staked on developing applications for the mobile iPhone. The manager, Miguel Campos, has made the necessary contacts with the technical and commercial leaders of the American company 'Apple Inc.' as well, with the administration and engineering team of 'KMP Digitata' (Manchester, England) to discuss the establishment and development of various projects in partnership.



Figure 7 – Examples of some applications developed by WOW! for iPhone

So having decided to internationalise their core business and to have a presence in the global marketplace as a technology-based company with services that can be provided at a distance, WOW!Systems intends to invest in creating virtual offices – a modern, efficient and cost-effective way to develop a business which helps to reduce the initial cost of setting-up and to appoint commercial representatives in Dubai, Caracas and Shanghai.

Open Questions for Debate

1. What is the importance of entrepreneurship and innovation as a means of stimulating the economy and creation of new businesses?
2. What are the advantages and difficulties of a business start-up?
3. Is there a right time and manner to move forward with the internationalization's process of a technology-based company? Or should technology-based companies be 'born global'?
4. What are the advantages of the new concept of virtual offices in the process of internationalization of a company?
5. How important is knowledge to support innovation?

Case 3.2. Tomorrow options – Remote monitoring in healthcare

Nádia Lemos, CEIM – BIC Madeira

The beginning

When Catarina Aroso Monteiro and Paulo Ferreira dos Santos started a Master's in Innovation and Technological Entrepreneurship in September 2004, they never thought that would lead to a technology that would change their lives forever.

While doing their course, the two students became aware of the existence of a technology developed by Miguel Velhote Correia and Sérgio Reis Cunha, two lecturers and researchers from the Faculty of Engineering at the University of Porto (Portugal). Conscious of its potential, particularly in the medical field, Correia and Cunha invited Catarina and Paulo to elaborate a business plan for developing and commercially exploiting this new technology.

From the academic plan to the reality was just a small step. The four decided to establish a company for designing innovative electronic devices to address global needs based on a B2B approach, with the main focus on medical applications.

The first product

The company's founders were the two students, the researchers and INESC Porto, a Portuguese R&D Institute with an international reputation. 'Tomorrow Options' was created in March 2007 as a spin-off company of the University of Porto. The specialized human resources working in partnership with the scientific-technological system was the key to boosting the company's potential.

As a fast-growing company there was a constant need for significant capital to support product development. To face this need, in November 2007 they obtained their first seed-capital from Ciencinvest²⁷. In June 2008 InovCapital, a Portuguese venture capital society, joined the board of Tomorrow Options and they were able to leverage the business for the coming years.

In December 2009, with an investment of approximately €800,000 they began to do business with some British hospitals. The United Kingdom was chosen as the company's market platform and in May 2009 they established a subsidiary in Sheffield. *'We chose England because it is an extremely competitive market. So, either we would die very quickly, which was not necessarily bad because it would save us a lot of money, or we would grow very strong.'* explains Paulo Santos. The first product launched was 'WalkinSense', a unique device to prevent foot disorders especially in patients with diabetes.

The technology

The idea of developing a new complementary diagnostic tool was born after the business partners discovered that the existing devices for diabetic foot disorders were so expensive and complex that they were only being used in laboratory environments. Diabetes has a high direct cost to the health system. It can cause foot ulcers and lower limb amputations and reports estimate that diabetes is responsible for one limb amputation every 30 seconds, at a cost of \$30,000 to \$40,000 per amputation. Every year 15% of diabetes patients will develop foot ulcers and 15% per cent of those will have no choice but to face amputation. It was these facts that motivated the company to develop a technology targeted at fighting the problem by preventing foot ulcers at an early stage to avoid more drastic steps and save money.

²⁷ A company working in the field of the economic valuation of research results.

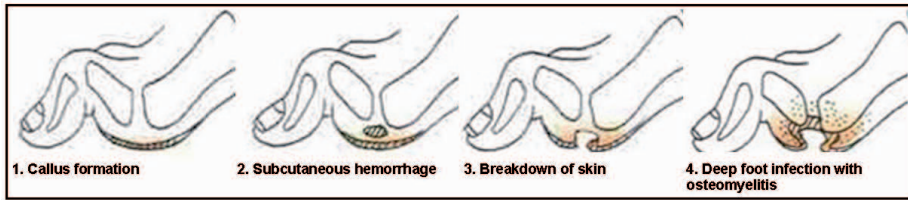


Figure 1 – Foot ulcer formation

A Portuguese patent was issued in January 2008 (PT 103933) and one year later it was converted into a PCT for the European Union, USA and Canada.

WalkinSense allows real-time monitoring of a patient’s lower limbs. The device works, through sensors placed on insoles or directly on a patient’s socks, which collect, store and process data (activity, plantar pressure and motion) that can be easily analysed by medical staff. The accuracy of the data allows the rebalance of weight distribution on the sole of the foot and the reduction of pressure in areas at risk of ulcers through the prescription of custom-made insoles or shoes adapted to each patient’s condition.

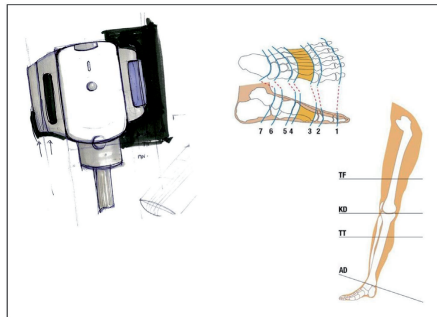


Figure 2 Amputations related with diabetic foot are normally in slices: usually after the first one the patient must be amputated again in less than 3 years and dies after 5 years.

The portable device processes live information and sends it for analysis to a computer (or another portable device), via Bluetooth or USB. The software is very simple to operate and allows the dissemination of information among the medical staff, encouraging a multidisciplinary approach to medical interventions. This simple and easy approach also benefits the patients since their daily activities can be monitored for up to seven days, without them being confined to a laboratory environment. When the information is collected the patient can even send the device by post to the clinician, reducing the need for visits to medical centres.

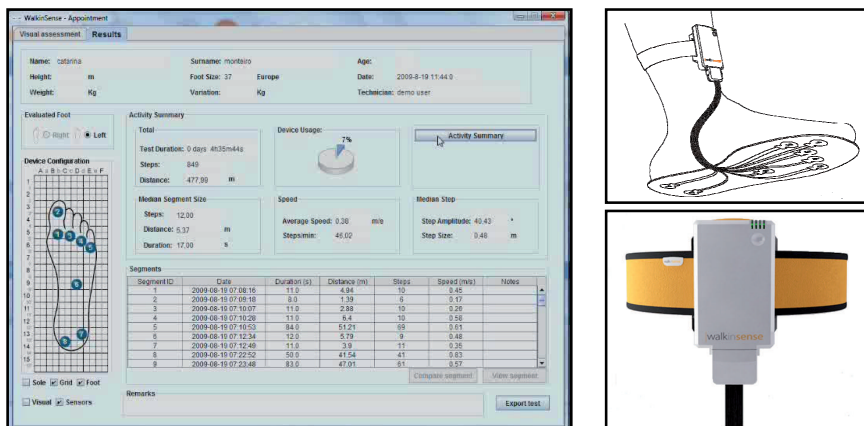


Figure 3. Left: software for reading patient data
 Right: Lower limb monitoring

The advantages of the use of this device to avoid major medical complications and increase patient welfare are undeniable. The advantages for health systems are also obvious. But why is WalkinSense such a tremendous success?

For Paulo Santos there are several answers to this, but the fact that this technology filled a gap in the market should be taken into account. *'In the market we found many types of equipment to analyze mobility, motion and plantar pressure. But a technology that brought together all these complementary analyses was new in the market.'* Combining all these functionalities in one compact portable device was a major innovation providing clinicians with a cost-effective way of taking actions based on quantified information rather than visual inspection and of immediately assessing their effects instead of waiting for a laboratory report. It also helped increase the number of patients with access to up-to-date technology.

The core technology used to develop WalkinSense is considered as perhaps the best in the world for monitoring lower limbs. The company is now developing it to explore other applications in the health market, like simultaneous monitoring of lower and upper limbs in post-stroke patients for rehabilitation purposes, physiotherapy or occupational therapy, and in sports medicine to correct athletes' posture, improve performance or avoid injuries. There are other products and services under development that will be launched shortly to solve other health problems, like the avoidance of bedsores (pressure ulcers developed by some patients who stay in bed for long periods).

Tomorrow Options is clearly an innovative high-tech medical device manufacturer with a well established direction.

Open Questions for debate

1. What is a fast-growing company?
2. To be global, does a business only need to have an internationalization strategy? How can it address global needs?
3. What is disruptive innovation?
4. What is the role of the entrepreneur in achieving success for a project?

Case 3.3. MadeinLocal.com: A local start up taking advantage of the global trends

By **Desiderio Gutiérrez Taño** (EDEI Consulting Managing Partner and Professor of Marketing, Department of Economics and Management, University of La Laguna, Spain, email: dgtano@ull.es).

Based on a business plan carried out by promoters in the Lausanne Hotel School (Switzerland).

Abstract. MadeinLocal.com (MiL) (<http://www.madeinlocal.es>) is an start up company that was founded by Manuel Acevedo and Cristina Acevedo in 2008. Its core focus is to provide an innovative solution to mobile communication and local social connection through means of an interactive social network operated via web site and Smartphone application. The team is now composed of five members resulting in a strong and cohesive team with core skills and competencies. MiL has a strong technical background and has a strong connection with EPFL media laboratory and collaborates also with Swisscom Labs²⁸, as well as collaboration with a team from IMD and EHL team, this knowledge as well as further research and business capabilities are enforced, creating a well supported and motivated team.

MiL is a guide based on social networks. Over the last 2 years, MiL has achieved many accolades including the EPFL Innogrant, Venture kick and the Prix d'excellence Trophée PERL, Tenerife Emprende I+D+i 2009, etc.. MiL connects people to the local community, both social and commercial, thereby sustaining and strengthening local economy and social life. Its vision is to create a global social network which considers MiL as the priority platform for social interaction and for promotional activity; in effect, a community linked to one another in business and in private, through MiL.

1. Background

Society's demand for social interaction has led to furthering the trend of globalisation, with business-based and social interaction crossing borders at an ever-increasing pace. This global cohesion has substantially increased the rate of development, community growth and cultural adaptation, bringing with it a more urgent need for quick, effective communication across time-zones and personal circumstance, as was seen with the adoption of cellular communication and instant messaging.

The need for ubiquitous communication has progressively led to the need for ubiquitous self-expression, a trait firmly led by Millennials. In accordance with their behavioural characteristics, Millennials are leading the social demand for means of sharing personal experiences, opinions and information as soon as they occur, prompting a substantial growth in mobile based social networking, substantially overtaking the use of cellular communication and instant messaging. Facebook is, to date, the most popular mobile application download across all age groups, geographies and mobile-phone systems. Likewise, currently 80% of Twitter activity occurs through mobile devices, further substantiating this need.

All this is marked by some trends that entail:

- That where I am is important: geolocation.
- The taxonomies offered in my environment are important.
- What other users say or do helps me to decide.
- What I am is important. Multiple identities: Antiques collector + gourmet. Now and in a while.
- My current mood is important.

²⁸<http://labs.swisscom.ch/en/content/madeinlocal-social-network-meet-friends-city-best-bars-restaurants-and-events>

- My time-frame is fundamental: fractional availability of time to do activities.
- The value (founded advice, current y relevant) that the rest provide me is critical for the assistance model.
- Gadget-software: everything which is automatable, plus everything they can contribute with here and now regarding knowledge, hospitality should be animated and incentivated.
- The taxonomies are adjusted to flexible offers and suitable to different turistic typologies: sun, beach vs urban; short stay vs long stay, business versus vocational.
- Apps of Apps? To promote links focused on enriching the platform's value.

In this context, many applications have been developed and they compete in the vast area that tries to connect people with physical spaces. (Gowalla, FourSquare, facebook place, ...). These companies have experienced much success in their short-time within the market, specifically emphasizing the market's interest and propensity of rapidly adopting such a product. Gowalla grew to 50 000 users within 10 weeks after launch, posting 20 000 check-ins (I'm Here) daily, and has recently raised \$8.4 million in financing. Similarly, FourSquare now counts 150 000 active users in their network and has recently been awarded \$1.35 million in funding. These competitors, whilst offering social networking within a gaming context, do not meet the needs of merchants within the promotion and advertising offering. As such, it is concluded that in addition to the end-user market potential, MiL has the unique possibility of entering the growing mobile-promotions market, successfully combining the two to create mass company potential.

2. Business Model

Value Propositions

MiL connects the visitors with 'friends' from the local community and permits us plan social activities, receiving in a geolocated way recommendations about leisure and cultural events. It allows us to find offers, value them, connecting and meeting friends. It shows the real local way of life, with its culture, gastronomy, small shops. In conclusion, the charm a city may have when somebody shows us around a new place.

Consumers, the end users of the application, are offered the opportunity of downloading the application for free from the app store. They are subsequently motivated to use it due to the benefits that the merchants offer for sending "I'm here!" messages from their venues and spreading the information of their location through their social network, Facebook and other connected networks. In addition, each consumer is driven to use the application in order to see where his friends (members of his social network) are, as well as to climb a "social status" on the application enabling access to even more benefits.

And on the other hand, MiL acts as a promotional platform, with advertising options, for local merchants, giving them the opportunity of introducing loyalty programs to their ideal clientele. Through this effective promotional tool, merchants have the opportunity of reaching their clients at all times and with the right offer, rendering them a loyal and valuable client source. Ofrece a las empresas una promoción de servicios de Internet, donde pueden diferenciarse por la calidad del servicio y beneficiarse del boca a boca de sus clientes en las redes sociales

The business system is meant to be based on the principle of variable subscription of the business owners to the service. By subscribing to the MiL service, a merchant is given access to his showcase, receiving the opportunity to upload additional information about his venue and set the targeted profile of his clients. The conditions of the loyalty programs can also be easily set-up, depending on the merchant's strategy, needs and wishes that could differ according to client profiles.

Channels

MiL represents a platform for social networking that allows its users to experience the Real World by connecting with friends in the local community via 2 interlinked mediums: the website and Smartphone application.

Customer relationships

MiL bases itself on 2 core pillars: an Interactive Social Network and a Local Directory, both within an entertaining context to keep consumers active and involved.

Revenue Streams

The revenue mechanism is based on four main sources of revenue: a variable subscription, paid content, paid placement and advertising, in order to diversify revenue streams as well as ensure flexibility of the business model.

The variable subscription gives the customer access to the venue showcase, opportunity to create a loyalty program for his clients as well as the possibility to promote events and special offers taking place at the venue (a fixed monthly fee for access and the weekly and monthly statistics of the venue and/or a variable fee determined based on the number of triggered push notifications with events and other promotional offerings of the venue).

Paid placement offers the merchants the opportunity of selecting locations where an end user of a corresponding profile, with a MiL application installed on his phone, would receive a push notification regarding special offers, events or discount vouchers from the merchants paying for the service. Merchants would then bid for the specific areas, locations, in an auction form which would determine the final price of the given location.

Subscription, bidding as well as all transactions between the customers and MiL should be based on an online communication and online payment method, therefore via PayPal or other online payment providers.

Key resources, activities and partnerships

The key resources for business development have been the technological infrastructure and the competence and awareness of the staff. The database has been their own creation.

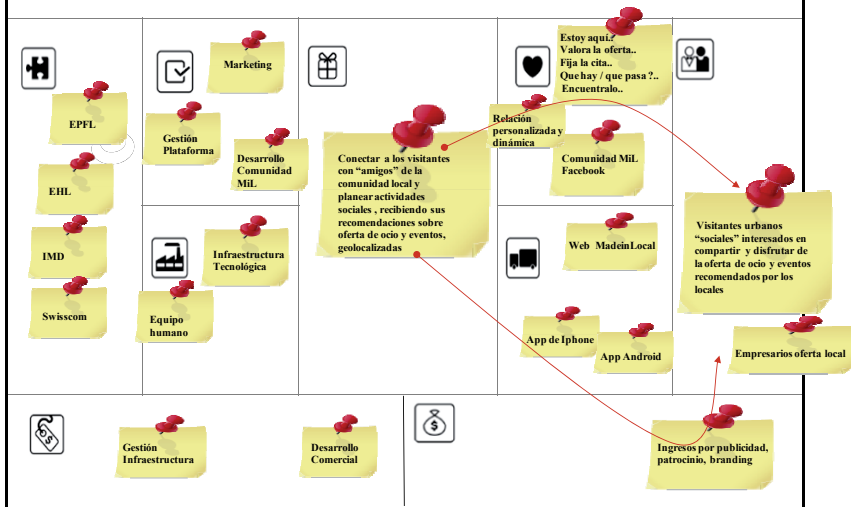
The development of the MiL community and the commercial activities of the business people of local activities are fundamental for business developing that should be based on the optimum management of the platform with partner support as the Swiss Federal Institute of Technology (EPFL) and Apple, Android, EHL, IMD School

3. Development Status

In this moment, MiL is in Lausanne and in Tenerife. They will be in other cities such as Zurich, Berna and Geneva shortly.

MiL is now at a stage where the website and Smartphone applications (iPhone & Android) have been created and are ready for introduction to the market. Clear launch and expansion objectives have been outlined, supported by an extensive marketing strategy to ensure success in execution. It is the aim of MiL to create mutually beneficial partnerships with external companies whilst launching and promoting the product. As such, partners for introduction into the Swiss French and Swiss German regions and Tenerife, have been identified and steps have been taken in cultivating these relationships. Planification is underway for the gradual launch of MiL in the rest of Switzerland, its neighbouring countries and finally the rest of Europe. MiL is presently in a position whereby financial investment is asked to ensure optimal marketing and promotional efforts for the immediate execution of the product launch

Análisis del Modelo de Negocio : MadeinLocal.com



Case 3.3. TEACHING NOTES

Learning Purposes

Discussion points are based on the following matters:

- Source of inspiration: The trends. To discover business ideas it is necessary to have an observing attitude and the capability to understand clients' needs. In this case, create a model concerning current trends.
- There are no geographical limits. The fact that you are far away from the production area or of certain markets is not an inconvenience to develop some kind of business. Many times, entrepreneurs limit their vision to local markets or to local production capacity. This is clearly a myth.
- The financial issue proposed in the model, that is to say, the way income will be produced is an important key to success because of its alignment with value proposal.
- The use of the canvas diagram by Alex Osterwalder as a common language for the analysis of the business model will allow student model and make prototypes of future business models.

Model Answers

The proposed tasks for students to carry out after the case is studied are:

- To build a new model created by MiL, identifying 9 blocks from the canvas.
- To meditate on the generation of ideas process.
- From ideas to the proposal of value.
- Key to success with MiL business model.
- Critical matters concerning the business model.
- Build new prototypes of business models.

Methodologies

Alex Osterwalder canvas (<http://www.businessmodelgeneration.com/>)

Case 3.4. Oikos Energy Services: making the most of opportunities and generating value in hard financial times

By **Manuel González de la Rosa** (Lecturer in Marketing, Department of Economics and Business Management, La Laguna University, Tenerife, Spain, email: mgonzale@ull.es)'

Abstract: The case of Oikos describes the experience of a small team of university entrepreneurs from the Canary Islands, on the extreme periphery of the European Union, that managed to identify certain gaps and detect business opportunities within the environmental sector. Therefore, after realising the value they could offer to the market by means of a vision wholly oriented towards customer satisfaction, they decide to begin the process of creating and developing an energy service company. It is a case that holds many lessons for entrepreneurs concerning the need for a marketing philosophy, wide vision and an innovative and proactive attitude.

Key words: *entrepreneurship, power services, needs, satisfaction, value, customer orientation, marketing.*

The conception of Oikos

Oikos Servicios Energéticos S.L. (Oikos Energy Services Ltd.) is located in the Canary Islands, and formally commenced trading in July, 2009. There were three founding members: Diana Mesa, Etaín Jiménez and Jacob Quintana. Having read similar subjects at undergraduate level, the three met as students on the first ever Renewable Resources master's degree course, offered by the University of La Laguna, in Tenerife. Each of the company partners contributes to the business in a special way; the chemical engineer with his technical knowledge, and the two chemists with their experience in the research and development field.

Only a year later, supported by *Emprende.ull*, they entered a programme belonging to the University of La Laguna aimed at the creation and consolidation of companies within the University community. With the experience gained throughout this period, the project materialized from an initial idea that was little more than a dream, and turned into a rapidly growing company. They decided to implement the business idea towards the end of their master's degree, when they realised the strategic importance of the renewable resources sector and the opportunities that exist at a time when the world is facing an energy crisis. The partners firmly believe in the development of a project committed to promoting a new model of sustainability, which is eco-friendly and involves new technology.

The idea arose because one of the company partners realized that roofs in Tenerife were not sufficiently exploited, and that they could take advantage of this potential. Therefore, they set out a business model of distributed renewable power generation, using photovoltaic powerplants in a turnkey operation type of project. As they developed their business scheme, the original idea was complemented by a second business field: an energy audit service.

The three entrepreneurs believe that they have the ideal number of partners, since difficulties are much easier to handle and problems are shared between them. In the case of a single entrepreneur, the problems would all fall on the shoulders of one person, which could lead to the failure of the business project. In the case of two partners, the situation would slightly improve, but decision making could be difficult because of divided opinions. They are completely conscious of the fact that the development of the company requires efforts in all areas: in its commercial activities, production, financial and organizational fields, and administration. Although

currently it has only two employees, they are convinced that every organization should be committed to innovation, creativity and entrepreneurial spirit.

As entrepreneurs, adopting an open and proactive way of thinking is fundamental. They must take the necessary steps so that the company can begin to expand, taking agents, institutions and resources into account, all in the specific context of the Islands. They have a clear objective, which is to innovate and, generate new ideas that will be seen as valuable by the target public and accepted in the market. For this reason, they recognise that they must work on the customers and the markets and that it is fundamental to gain positive results for all of the parts, as well as evaluating the time they will need to recover the initial investment. They see that in the short-term this new business concept should be boosted through a leadership scheme related to business exploitation and with a long-term vision that permits the exploration of new opportunities. In this sense, they know that new ideas should be developed in the context of the new global market, and also that creativity, innovation, and internalization constitute new values that end up converging and represent the company's vocation.

Services that satisfy needs and generate value

Companies like Oikos provide energy services in the facilities belonging to specific users, to enable them to make substantial energy savings.

These savings are achieved by improving energy efficiency in the installations or by means of renewable resources. Oikos offers two very different services. Firstly, it offers a turnkey service for global management, and the positioning of photovoltaic solar energy appliances on building roofs. Secondly, it provides energy services, which include all types of measures to improve the efficiency of installations belonging to clients. Although the first service they developed was turnkey photovoltaic installations, they have recently and quite successfully launched an energy audit service. The next step in developing the energy consultancy service consists of carrying out investment projects for clients, mostly hotels, within the efficient energy technology field. Therefore, the main need they cover is that of considerably reducing the cost of electricity, fossil fuels and water in their installations or workplaces. As for their turnkey service for photovoltaic installations, it is believed that in the next five years a great number of low power photovoltaic plants will be established in the Canary Islands. The fact that the Islands are an internationally recognised tourist destination means that there are many hotels, so this creates great potential for energy services.

The needs that Oikos expect to cover can be grouped into the following:

- Customer needs: Cost reduction related to energy and water supply of individuals, and hotels, with the subsequent improvement of their competitiveness and corporate identity.
- Legislative needs: Legislation promotes greater efficiency in the use of energy, with the clear objective of decreasing CO₂ emissions and green-house gases that cause climate change and global warming.
- Needs related to environmental public awareness: Many tourists refer to the need for technological improvement in environmental management (energy and water savings, use of alternative energy, waste management and reusing water and waste). Awareness of environmental issues is increasing amongst tourists that visit the Islands, so the fundamental goal should not only be to increase the quality of tourism, but also to improve efficiency in the use of resources and respect for the environment.

Marketing and customer satisfaction

Their first task for the partners was to convince themselves of the importance of focusing on the market and customers. The next step was detecting market opportunities by carrying out market research.

In particular, they looked closely at how to commercialize their product, emphasizing selection of clients, as well as the development of their marketing plan.

In general, photovoltaic installation clients are looking for alternatives to traditional investment projects, at least whilst clean energy is subsidized. With relation to energy services, the customers are mostly MDs of companies with facilities that consume considerable quantities of power, water, and thermal energy, and who want to reduce their expenses.

Therefore, any facility with significant power consumption can take advantage of services provided by Oikos, although in this first phase they are focusing on tourist facilities, especially hotels. Different studies show that the hotel industry in the Canaries, although proving itself a high quality sector, performs badly in terms of energy. Therefore it is a suitable sector in which to develop energy efficiency. At the moment, the hotel industry is not especially aware of the advantages of energy control policies, nor of the introduction of energy efficiency innovations, although it does use resources for corrective maintenance of its installations and equipment.

From the beginning, the Oikos partners were aware of the fact that the key to gaining competitive advantage is to offer good value. They feel that they should exceed, rather than simply meet, user expectations. In conclusion, they must satisfy the consumer because a satisfied customer will be loyal, buy more services, speak well about the company, and pay less attention to possible competitors.

Obstacles

One of the major problems that they found when they decided to start up this business was that one of the founding partners had a technical profile, which made it very difficult to undertake administrative and management tasks. The help they have received from Empreunde.ull has given them access to specialized technical advisors in business administration, as well as training courses which have been vital for the elaboration of their business plan. Another of the problems they have had to face is running the business while keeping their other jobs, which is necessary for survival until they secure financial backing.

The greatest difficulty they have at the moment, now that the business is already established, is the lack of financial support they need to produce energy saving products. This is due to the ignorance that exists of this emerging sector. Problems have also arisen when seeking funding for general company expenses. Loans and subsidies for small and medium-sized businesses come with unfavourable conditions, such as high interest rates, and restrictions on how the capital can be used. Most of the financial institutions they approach are more concerned about bank guarantees than the potential of the staff or the feasibility of the product.

Critical Factors for success

As a consequence of the current economic crisis, the international financial panorama has changed drastically. The Canarian economy has suffered its effects much more than other regions or countries, so keeping company costs down is a challenge that should be seen as source of competitive advantage. Actually, the current economic situation has favoured Oikos, because they sell businesses the means of saving money through energy efficiency. Many of their clients want to cut their electricity bills, so they agree to commit funds to do this, investing today to get savings in the long run. In addition, companies receive encouragement, in the form of government subsidies, for making investments in energy saving. On the other hand, the global environmental situation has made individuals and companies become more efficient and responsible regarding their energy consumption, therefore, working on sustainable development. For this reason, although the current financial situation is difficult, the energy services sector and renewable energy are being driven by different civil services. Nevertheless, it is believed that the cost of photovoltaic solar energy will soon be the same as electric energy and it will no longer require a subsidized model of electricity generation and distribution.

Oikos has examined its own capacity for success, and this has helped them to understand the difficulties they must face, the implicit risks and the improvements required in their business. The potential for expansion depends on company issues, such as team management and the quality of the staff and the products, as well as sector and market issues. So, in analyzing its potential, Oikos has considered increasing its production capacity, market share, implementation soundness, logistic organization, capacity to accept compromises, product-service offered, competitiveness, the financial backing for the start up and development of its business activity, the specialization and qualification of its human resources, as well as the solidness of its decision making.

In the energy services field, the financial capacity of companies is absolutely fundamental. For small companies with limited capacity that want to enter the market, the best way to become competitive is by means of industrial models or efficient technology of their own. Oikos has €35,000, for the acquisition of fixed assets, mostly energy measuring equipment for clients' installations. There has been no need for investment in workplaces or machinery, because they offer a consultancy service. The resources were obtained from a financial institution and the time needed to recover the initial investment was short. To improve their current situation the company needs, on the one hand, to gain the financial capacity to invest in installations for clients, recovering this investment by achieving energy savings. On the other, to stand out from the competition, it is necessary to invest in research and development and to develop efficient energy technologies of their own. This is because at present there are very few technologically innovative products on the market and those products which are available are affordable for all companies. This is the only way in which emerging companies can confront bigger ones in the same sector. For now, in the first two years of its development, Oikos has not visualized any expenditure on research and development because all its resources have been devoted to start-up and fixed assets. Oikos is clearly aware that at this time of global change and growing competition, its future depends on finding new markets and new systems where their products and services can be offered. Therefore, though they are currently focused on improving their position in the regional market, they are also considering future expansion into the African market. It is too soon to talk of success, because the company is still in the early stages of its development, but it is certainly consolidating, with business from both the turnkey photovoltaic projects and the audit service increasing steadily. It is in this area that they want to make a real difference in the near future, with greater technical knowledge and innovative technologies of their own. They consider that they are well positioned in the market because they are in an emerging sector and there are very few companies doing the same thing. They are going through a very exciting period, because this market is only just beginning in Spain and the Canary Islands. It is too soon to talk about its evolution, but the main objective and the greatest task ahead is to move from an efficient energy market which is subsidized to another in which credit facilities are fundamental, and where energy service companies must find external funding for their clients. Nowadays, technology moves fast, so they are drawn to seek the collaboration of the University of La Laguna as a strategic ally to innovate and create new efficient technologies to enable them to stand out from competitors.

Case 3.4. TEACHING NOTES

Overview. In this case study we analyse the process of creation and consolidation of Oikos Energy Services, a company formed by young university entrepreneurs from the Canary Islands. The case emphasizes the connection between entrepreneurship, detecting needs, making the most of opportunities in emerging sectors, generating value and satisfying clients. The company's business vision is based on a marketing philosophy which includes these elements.

TEACHING/TRAINING OBJECTIVES. With the analysis of this case we want:

- To illustrate some of the factors in the entrepreneurship process.
- To show the importance of visualizing needs and making the most of business opportunities in the current global context.
- To show the relationship between entrepreneurship, innovation and internationalization.
- To analyze the steps a company must take in the process of creating and generating value.
- To show how careful analysis of options can guarantee success.
- To look in detail at the grounds, the objectives and contents of marketing philosophy as well as customer satisfaction.
- To raise awareness of the difficulties in setting up a new business.
- To underline the positive aspects of entrepreneurship and how it can contribute to solving the environmental problems currently facing the world.
- To help students gain basic notions of business development activities in a global context.

Intended courses and target audience(s)

- Entrepreneurs involved in setting up new business initiatives, especially in the renewable energy and sustainable development fields.
- Business administration and marketing students.

Suggested training techniques (Teaching methods): Group work and class debates.

Topics for discussion

The most relevant aspects of the case are:

- The entrepreneur and the proactive way of thinking of the staff.
- Market needs their evolution and the analysis of opportunities.
- The generation of value, customer satisfaction and market orientation.
- The difficulties faced by the entrepreneurs in the implementation process.
- The key elements of success.
- The focus on generating income by means of energy saving.
- Global business vision.

Once they have studied the case the students should be able to:

- Analyse the initial idea and the business opportunities in the alternative energy sector.
- Evaluate the arguments concerning the staff and the difficulties they have encountered.
- Carry out a SWOT analysis.
- Reflect on the service that is offered, the value proposal for clients, and the concept of generating income by means of energy saving.
- Understand a marketing philosophy based on customer satisfaction.
- Suggest strategies for the internationalization of trade in other businesses with these specific features.

Assessment criteria: Participation, receptiveness and a positive perspective.

Additional readings and references: Marketing and business management manuals. Entrepreneurship and business building manuals.

Case 3.5. Subbabel: Subtitling the future

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Prof. M. Alicia Bolivar Cruz (Universidad de Las Palmas de Gran Canaria)
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Abstract. The following case study describes the origin, effort and tenacity of three young Canarian Philology graduates who, after receiving specialized training in audiovisual translation, chose to take the plunge and create their own translation services company. The determination that the founders of Subbabel show in their profession, their firm belief in research and development and the global vocation of their firm, make them role models for technology-based companies in this region. Their recent incorporation into the APEX program – “Learning to Export”– of the Spanish Institute of Foreign Trade, took them to a new dimension and gave them a new market vision that would demand strict management in order to gain increased competitiveness. Challenges they were willing to face.

Key words: *Philology, translation services firm, R+D, global market.*

Entrepreneurial Team Formation

In October 2005, having recently graduated and full of enthusiasm Carlos, Jennifer and Javier enrolled in the first ever Masters degree course in Audiovisual Translation- Subtitling for the Deaf and Audio Description for the Blind, offered by the University of Las Palmas in Gran Canaria (ULPGC). They formed their relationship, first personal and then professional, whilst, completing their first project, together with 17 other classmates. Training was also an essential part of this course and they found themselves faced with a complex project for the International Festival of Animated Cinema, Special Effects and Video Games (ANIMAYO) which was held for the first time in Gran Canaria in the spring of 2006.

Jennifer Vela and Carlos Pérez, both with degrees in Translation and Interpretation from ULPGC, and Javier Pérez, with a degree in English Philology from the University of La Laguna, volunteered to direct and coordinate their fellow students in a project undertaken for the Festival. Although the efforts and working hours required were more than a busy master’s student could afford, the experience was a pleasant and positive one. They were satisfied with the results they achieved in this, their first major project.

The impact on those who participated in the Festival was such that, when the directors of the master’s course gave a presentation on the existing employment opportunities in the Canaries and mentioned the poor job prospects in the region, they did not lose heart, but considered the possibility of creating their own company - a company that would allow them to establish themselves professionally and carve out a future for themselves, and a company that had a place for all their colleagues with whom they had shared so many hours of effort and training. With this in mind, the course directors allowed them access to some presentations by entrepreneurs that were organized in the University. This was to be the first but not the last time that they would hear about the power of the entrepreneur in transforming the world. Now it is Jennifer who takes part as a speaker in these meetings and conferences to offer her expertise to other university students.

And Subbabel sees the light

Despite the great interest shown by all the twenty students in the creation of their own business, when they attended a meeting set up for this purpose, they realized that having such a high number of founding members would not work. Because of this they agreed that some of them would lead the business, leaving the others to

work as collaborators in various other service areas of the company. Again Jennifer, Carlos and Javier stepped forward to lead the project. They would be in charge of setting up the company.



None of them had previous business experience. The only one who had any kind of experience was Jennifer, who had spent some time working as a freelance translator. Up to then, Carlos had survived with after-hour jobs to pay for his studies. However, this insecurity and inexperience did not stop them and they enrolled in the Entrepreneurship Programme at the University Foundation in Las Palmas to meet and share concerns with other intrepid students.

The hours invested in the training programme helped them not only to acquire many useful skills in business management, but also to build a strong network of contacts. Along with their mentor on the Entrepreneurship Programme, they took an active part in the creation of a special business incubator which would allow them access to necessary infrastructure at a lower price and the support and expert advice which is invaluable for the creation of the company. That is how Subbabel Ltd.NC²⁹ began, in August 2007, when Jennifer, Carlos and Javier raised the €3006 needed for the creation of the business.



The beginning of their career

Their experience at ANIMAYO provided them with privileged inside information: in the Canaries, there was no company that offered subtitles for movies, documentaries or any such audiovisual material, and in Spain there were no companies that catered for people with audiovisual disabilities. Although their early work focused on activities such as subtitling for screenings at festivals, they soon decided to expand their range of products and services. This is how they soon became known as the first and only company in the Canaries specializing in audiovisual translations and a pioneer firm in the field of audiovisual accessibility for people with hearing and visual disabilities.

They worked hard, day after day, and finally after 6 months of overstretching themselves by working in every area of the company, they realized that this approach to the business wasn't productive enough. So they chose to divide the main tasks among themselves in order to be able to cope with the growing volume of work. Each of them took on activities best suited to their profile, and hence were able to work more comfortably.

Javier, always organised and methodical, became the administrator and took responsibility for the economic management of the company, which entailed dealing with the accounting advisor and the financial and fiscal paperwork, and also overseeing quality control³⁰. Carlos, who demonstrated from the beginning a keen interest in technology, opted to learn more on that subject, focusing intensively on the production side of the business

²⁹ The New Limited Liability Company (Ltd.NC) is a special type of limited company, recently established in Spain, suitable for small business projects, which facilitates the establishment and implementation with legal guarantees. See Law/Article 7/2003 of April 1. This type of company has access to specific grants available to new firms on the Canary Islands.

³⁰ A particularly sensitive matter for Subbabel concerns their specialized production for people with audio and visual disabilities. This requires them to comply with quality standards AENOR UNE 153,010 regarding subtitling, for the deaf and hard of hearing, and UNE 153,020 regarding the production of audio guides for people with visual disabilities.

and also on the shaping and coordination of the workgroups and in the management of orders. Jennifer, who was a member of a university research group at the University, set her sights on linking their business with the University and assumed the direction of the R&D department. In addition, the marketing tasks were equally divided between Jennifer and Carlos, depending on the products and services the customers required.

Jennifer's experience and interest in research helped the company advance in leaps and bounds toward optimizing their translation production process. This enabled them to increase their productivity and, therefore, their capacity to take on new projects and offer new services. In this way they could offer a comprehensive service, including complete audiovisual post-production that other companies failed to offer. Her training and experience also allowed them to offer a subtitling service for the deaf and to develop audiodescriptive scripts for the blind, enabling them to eliminate media obstacles and generally make life easier for people with audio and visual disabilities.

The appearance of an Angel

Convinced that their business would continue to grow, fueled by their tenacity and effort, they never worried about money. However, a private investor, attracted to this unusual company in the Canaries, where the cinema industry and audiovisual production is not as developed as in other parts of Spain and Europe, considered their project very valuable. This unexpected business angel brought what was needed for their expansion, allowing them not only to expand their service portfolio, but also offering them an opportunity to gain access to foreign markets.

Enrique Gutiérrez was in a position to provide a large sum of money for the project (which was not essential) and a network of contacts which would allow them to extend their client portfolio, give them access to privileged resources and provide them with new business experiences. Thus after much consideration and thought about the way this would change their company, the partners decided to accept the proposal, albeit with certain conditions: the financial control and control of shareholders of the firm would remain with the original partners. Therefore, after the capital extension at the beginning of 2009, Enrique joined the company as a shareholder taking a 23% share. This caused a restructuring of the business in order for the three original founders to each have an equal share and still be the majority shareholders over their business angel.

They soon found that Enrique's business background, his sound advice and his brilliant ideas could enrich the company and their business vision much more than of the new funds and financial liquidity could. He became their seeing-eye into the business world and an invaluable aid in the increasingly difficult business environment. Nevertheless, so as not to lose control and initiative within the company, Jennifer, Carlos and Javier introduced a set of rules which gave them 'the last word'.

The audiovisual industry in Europe and in Spain

The audiovisual sector is an expanding industry with the highest growth rates in Europe, and the United States. Eurostat (2007) estimated that in 1999 European production would be about €59.6 billion, a figure that would place it in second position in the global audiovisual market with a share of 35%, just behind the United States with half of that market, and ahead of Japan. The television sub-sector represents 81% of the value of European production, compared to the film and video sub-sector that represents only 19%. In Spain, the radio and television sub-sector represents 64%, compared to 36% for film and video. The information from Eurostat showed an estimated annual growth average of 4.2% in the cinema sector alone in the Western European market, allowing it to reach a turnover of approximately \$25,800 in 2010 (see Figure 1). In Eastern Europe the growth rate was expected to be even higher with a rate of almost 9% for the period 2007-2010.

Source: SPRI (2007)³¹

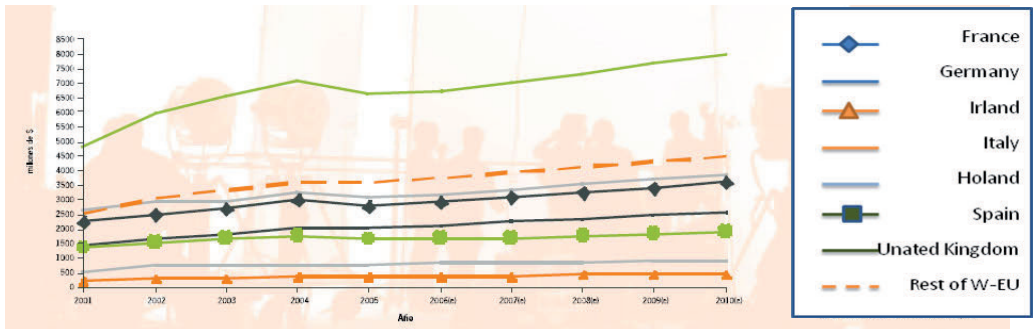


Figure 1. The Cinema Industry in Europe (in millions of Euro)

For its part, the White Book of the Audiovisual Market in the Canaries (2007) estimated that this global growth would continue to increase to 6.6% by 2010. This steady growth in the industry resulted from different revitalizing factors, i.e. the growth in radio and television signals which enables access to audiovisual services and increases the audiences, the introduction of broadband, the expansion of mobile phones and laptops and a general increase in the use of home entertainment devices as more people stay at home due to the tough economic environment. Thus the implementation of all these technological developments, such as those in digital technology, has helped the evolution of business models in this sector.

In addition, in Spain the progress made in this sector has been enhanced by the approval in 2010 of the law on audiovisual communications in general, which seeks to unify the existing regulations, update those aspects that have been modified, and regulate new aspects created by technological changes. New legislation is clearly needed, just to adapt to the dynamism in the constantly advancing audiovisual sector. At the same time, the Spanish legislation is subject to the EU Directive 2007/65 on audiovisual communication of the European Parliament and of the Council of December 11, 2007. This legislation aims to ensure security and stability both in Europe and Spain, and to maintain the growth and development of the audiovisual sector. In the Canaries they also recognize the importance of this industry for a fragmented territory far from the political and cultural centre.

The rapid improvements in the audiovisual sector have caused the potential volume of businesses like Subbabel to grow quickly. Thus there are various stages which have to be followed from the creation of audiovisual content to the time it is put into use by the customer. Each of these stages is likely to require 'translation and interpretation services', NACE code for the business activity developed by Subbabel. The finished product needs post production and processing of content for later broadcasting, which also normally requires translation. In addition, this means that on reaching the customers, these items are accompanied by support (technological, infrastructural or subtitles) which allows them to access, use and enjoy their product. Subbabel provides a service both in the support phase and in the editing and packaging phase, to companies in charge of production, distribution and use of Audiovisual content (see Figure 2).

³¹ SPRI (2007). Vasque Report of Audio-visual Industry. Available at: <http://www.spri.es/wNS/docs/publicaciones/sav.pdf>

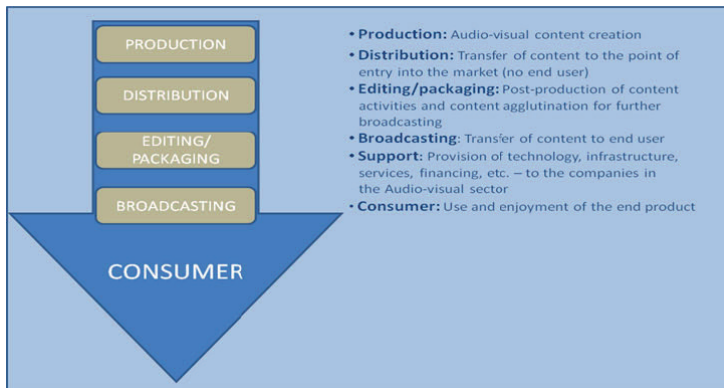


Figure 2. Stages in the value chain of the Audiovisual Sector

Source: SPRI (2007)³²

In this extensive productive sector, the interests of television, telecommunications operators, hardware and software producers, computer and content producers are all intertwined. None of them can produce a competitive final product on their own. All the sectors need each other to develop their business activity in an unusual market whose end-customer, the consumer of these products, has the last word (see Figure 3).

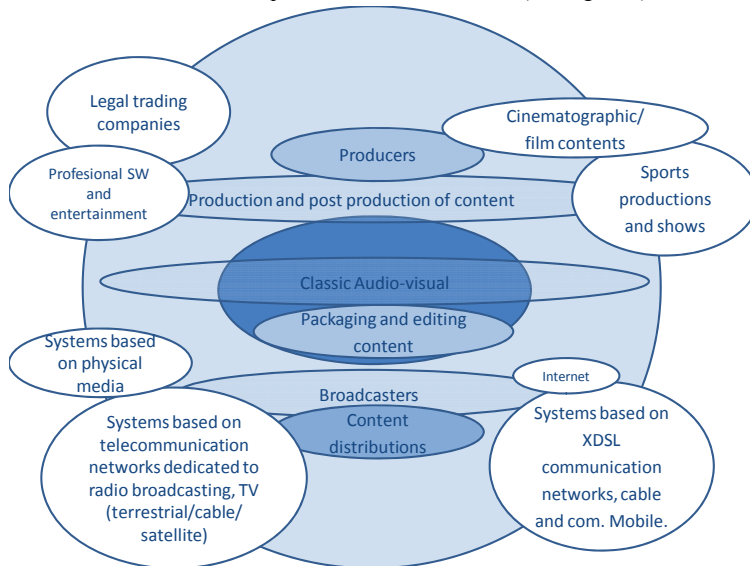


Figure 3. The Macro Audiovisual sector

Source: GRETEL (2005)³³

³² SPRI (2007). Vasque Report of Audio-visual Industry. Available at: <http://www.spri.es/wNS/docs/publicaciones/sav.pdf>

The following table presents the the number of companies involved in the audio-visual industry at national and regional level, which may be a potential market for Subbabel.

Table 1. Audio-visual industry: Number of firms (CNAE codes 2009)
Source: Compiled from INE (2010)

	58. Edición	59. Motion picture and video and televisión programs, sound recording and publishing music	60. Programming activities and radio and televisión broadcasting	61. Telecommunications	62. Programming, consulting and other activities relating to computing	63. Information services
Spain						
2010	10,379	7,705	2,093	4,032	24,160	4,786
2009	11,018	8,382	2,388	3,699	21,160	4,463
2008	10,836	8,013	2,284	3,663	20,019	4,003
Canary Islands						
2010	306	216	199	215	554	276
2009	329	263	233	198	567	115
2008	301	249	226	209	550	107

The competition grows

As supply expanded, so did the number of Subbabel's competitors. Until then, they had been the only audiovisual translation company in the Canary Islands that offered a comprehensive service in this sector. In spite of the fact that they were leaders in this unique niche, Subbabel's socially responsible approach to payment, put them in a prestigious position in the market. As Jennifer states, "The translation sector everywhere is highly competitive in pricing, and the Canary Islands are no exception. However at present, we are able to pay our employees well." The austerity policy implemented at the launch of the company as a result of the high price aversion in the sector and their interest in the development of the tools for improving the translation process, enabled them to save time, and achieve greater efficiency and performance.

"If we are able to do more work in less time, then we can do more projects at the same time and expand our turnover and profitability," says Jennifer.

However, on the mainland, a natural target for a Canarian firm looking to expand, they have a strong competitor, which has cornered the entire market for important festivals that are held in Spain. Nevertheless, in the domestic market the key variable with regard to the festivals is not so much the price as the confidence that the client has

³³ GRETEL (2005). *El sector audiovisual y su evolución. La televisión. Retos y oportunidades*. Ed. Colegio oficial ingenieros de telecomunicación. Madrid.

in the company. This confidence can only be achieved through direct contact with the organizers of the events. It is because of this that up until now the festivals held on the Peninsula were not targeted by Subbabel, as they were not easily accessible. However, the worldwide crisis has opened a new window of opportunity for them because public institutions have reduced grants for these kinds of events which resulted in budget cuts. And that is where Subbabel, as a result of their strategic focus on pricing and a good business approach, could make a difference. As a result, new clients from the mainland can now benefit from their offers and the company is becoming known for its good performance and efficiency.

With audiovisual services, as with their previous products, they offer not only translation and simultaneous interpretation, an area in which they compete against a handful of companies in the Canary Islands, but also a comprehensive service that includes the rental of the equipment necessary for DVD creation, screening, translation and interpretation.

With the passing of the Law in 2010, support services for television programming for people with disabilities became regulated. This allowed Subbabel to find an opening for business expansion and helped them to become one of the four main authorized companies in Spain that supply subtitles for the deaf, and audio descriptions for the blind.

The original founders of *Subbabel* are aware that the potential volume of business of the company is directly related to the number of companies competing in the sector and to the strategy followed by each company. Table 2 shows the growth in the number of companies in Spain and the Canaries for the period 2008-2010. In spite of the enormous handicap of transport costs for companies located in the Canary Islands, the sector has actually grown because many of the services offered do not require the physical presence of the operator.

Table 1. Number of companies in the sector 743
 “Translation and Interpretation companies” (NACE, 2009)
 Source: Compiled from INE (2010)

Total		
2008	2009	2010
Spain		
7,669	8,017	8,426
Canaries		
177	166	186

Customer Access

The company offers a service which is intangible, and also software that is forwarded by email. This allowed for new techniques to be released on the market when the marketing campaigns undertaken by Jennifer as a result of her business training failed. Since then they have maintained an active presence on Facebook, Twitter, relevant blogs and forums. They have an advantage here as many other companies have not even thought of this method. It is by these means, that customers located outside the Canaries contact them.

As the person responsible for communication, it is usually Jennifer who contacts the clients, and travels to see them when necessary. However, when the requested service needs technical advice, Carlos establishes a relationship with the client. In this way, each person heads the project that they originally started. For each project that they are involved in, they personally select the translator who will carry out the job. In doing this they improve their profiles to match the needs of the project.

This way of operating has proved successful. Turnover has continuously grown despite the economic crisis (see Figure 4) a fact that confirms that they are on the right track despite their initial doubts.

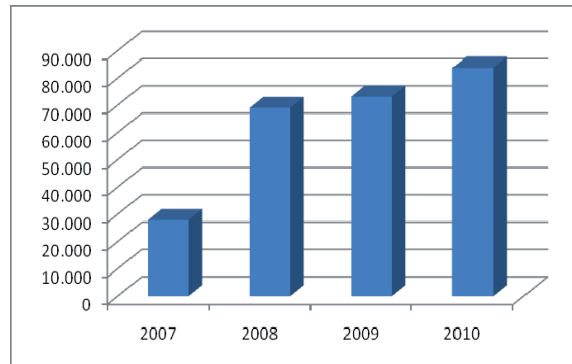


Figure 4. Annual turnover for Subbabel (2007 – 2010)

Source: Subbabel (2010)

Unique job database

What happened to their other colleagues on the master’s course? Well, they remain **attached to** the project, forming part of a unique database of freelance translators which is a priority for the company. Each project has its specific terms and requires a particular translator profile that has been previously defined by Subbabel then entered in a personalized and expertly managed database.

This database has grown without them even noticing it. It already contains more than a hundred CVs from professional translators, who are located all over the world. It is relatively easy for them to make contact from the Canary Islands, a place where there are many English, French or German native speakers. The island receives over 10 million tourists a yearsome of whom have established residence on the Islands. There is also a group of native speakers who are dedicated to translation and interpretation on the Islands. This group has not been forgotten by Subbabel. They are fully aware that the best translation is normally done by native speakers and that overlooking this could lead to lower quality translation and interpretation. As far as the company is concerned there are no limitations. They offer a selection of minor languages that has allowed them to further expand the translator database. Subbabel’s full-time staff is quite small consisting of the original three founding partners and a technologist who was taken on to develop specialized software and remains in the company as support for the research and development process.

R & D is “translated”

Jennifer carries the most responsibility, as she herself admits. Her passion for innovation in the translation process inspired the other partners and also the research group at the ULPGC with which she is linked, to apply further software research and development to their production process.

However, different approaches have been used to generate the applications and software used and developed by the company. Outsourcing was one of the first of these, as they urgently needed subtitle projection software and lacked the relevant means to produce it. As a result, they initiated their own development project, which required better information technology and communication research. They contacted the Architecture and Concurrency group at ULPGC which supplied them with a development process that they were unable to formulate themselves. As a result of this collaboration, and after assessing the need for an IT specialist through a Canarian government grant, they took on a scholarship student who acts as a liaison between the company and the research group. Miguel Gil became part of the company staff and is still there, even though the research grant has come to an end.

This small company, with its limited resources does not have an annual budget for R& D. This area is funded through various grants and subsidies that are becoming harder to obtain. The tasks of identification, documentation, completion of paperwork and attendance at public meetings have been looked after by Jennifer, although in the early days of the firm they had a part time worker who was responsible for these.

The worldwide deluge: The Economic Crisis

Subbabel was able to enjoy six months of prosperity before the economic crisis hit and became worldwide. So, the economic growth of the company has been marked by these circumstances. *“A significant percentage of the market is made up of public institutions that have had their budgets reduced, and so have had to cancel projects or at least have less money to spend or cannot pay on time,”* says Jennifer.

The fluctuations in the cash flow, resulting from the seasonal nature of their work, also causes certain cash flow problems which they have been able to avoid by using funds set aside from profits generated in the early years. They have also made use of cash prizes awarded to the company and monthly maintenance fees paid for a few projects established with firms needing ongoing translation of webpage material.

Faced with this frightening financial scenario, the growth of annual turnover showed a positive trend (see Figure 4) although not the desired curve. Growth was slow but steady. The critical year was 2009, when growth barely touched 6%. However, by the end of the last fiscal year, 2010, the figure had improved to almost 20%.

The future direction of Subbabel

The partners want the company to expand but they know it is going to be a challenge. The product portfolio continues to grow and will require continuous adaptation to suit the customers’ requirements and unmet needs of the sector. They know that location is very important in order to generate more client confidence but to expand geographically from the Canaries is expensive. A possible solution is to make alliances, a strategy which is underway. They maintain relations with the American Company ‘Polyglot’ which allows them access to a certain range of clients in the United States, and they are currently in negotiations with a German company so that they can continue to grow within Europe.

In addition, in May 2010, the Chamber of Commerce in Las Palmas offered them a position in the Innocámara Programme, which granted financing for a major part of their innovation process– the development of translation software to optimize the company’s production process. The training needed in order for the company to be marketable worldwide has been made possible thanks to the APEX-Learning Program (‘Learning to Export’) run by the Spanish Institute of Foreign Trade (ICEX).

Jennifer, Carlos and Javier have fought long and hard for their company, and they have dared to leave the beaten track. The chaos of the legendary Tower of Babel is a good analogy for this company. They have made their strategy clear from the beginning. They have taken expert advice from the academic business sector and made good use of it. Today, under the watchful eye of their ‘angel’, Subbabel has discovered its true calling: to be a leader in the Spanish audiovisual production industry, making sure nothing stands in the way of their expansion. Their priority is to transform themselves into a large company, doing things that “are worth the trouble”. They would like to think that within perhaps five years they could be a Spanish subsidiary of one of the multinational North American audiovisual production companies.

This ship with its three captains, who were each able to find their own role, has become part of the technological development and reality of the market and now face the challenge of keeping their business afloat, at a time of great economic instability, when as the saying goes ‘the big fish eat the little fish’. What will be the future for Subbabel? Will they join a larger company? Can they maintain their independence? For now, they are going to enjoy their success and recognition for a job well done.

Case 3.5. TEACHING NOTES

1. Overview (Summary)

This case study is about Subbabel. It describes the start up, consolidation and growth of a company created during the economic crisis which is currently affecting the world markets. Appropriate training, both professional and entrepreneurial, together with the willingness of the founders to take risks, were the key ingredients needed to create this company. This example highlights, the importance of diagnosing and addressing from the onset the lack of training that the founders have so that this does not cause a problem for the company, but instead helps them to meet the challenge. This capacity for reflection allows the founders to share the workload efficiently, taking into account the preferences, personal strengths and professional profile of each individual.

Also, the case explains how a *business angel* joins the company without the new ownership structure creating collateral problems. It also highlights the importance of innovation, both from the point of view of production – putting optimizing tools in place such as production processes for translators– or marketing –which is the generation of new marketable products, software production and the use of new communication channels.

It is remarkable how those involved in the creation of the company have managed to surround themselves with excellent advisors and how they have incorporated that advice into the running of the company, without losing the reins or changing its personality.

The main objective of this case study is to offer reflective material to the students to enable them to identify and better understand the importance of training tailored to the needs of a company and of listening to professional advice and incorporating this into their business objectives.

2. Teaching/Training Objectives

In the discussion of this case the student should be able to:

- Draw up a SWOT matrix for the business project presented.
- Locate Subbabel correctly in the audio-visual production sector.
- Draw up the value chain of the company and the business model underlying this company.
- Understand the role and the scope of ‘business angels’ in new technology based firms.

3. Intended courses and target audience(s)

The case study is intended for students interested in learning about the entrepreneurial process, as well as current and potential entrepreneurs. It can be used in specific entrepreneurship courses in areas related to strategic planning and market studies, in business organization, engineering, computer science and labour relations, among others.

4. Suggested Training techniques (Teaching methods)

The case study must be given to the students prior to their discussion, so that it can be read carefully in order to find the key points and take notes on the audio-visual sector, subtitling and translation, the company and its founders. The teacher should cover the following stages in the teaching process:

1. Provide an overview of the sector and its aspects, specifying that translation and subtitling is now accepted in Spain as a subsector together with audio-visual.
2. Review, with the students, the key elements that make up this business initiative observing: training, business opportunity, the entrepreneurial team, growth of the product portfolio, the production process management and also market expansion.
3. Create working groups for team discussions on the points made in 4 and 5.

4. Ask students to reflect on the general environment, the company environment, the company's financial plan and its model of growth.
5. Draw up future scenarios for the company, indicating how the original business model and the value chain should evolve.
6. Presentation (by the students) of the topics debated in points 4 and 5 by the working groups.

5. Questions (Topics) for discussion

The following questions may be discussed in the working groups:

- a. In relation to the general and specific environment of the firm and its own characteristics as a company:
 1. What are the external environmental factors that could generate a positive impact (opportunities) or a negative impact (threats) for the company?
 2. What are the internal environmental factors which should help (strengthen) the company in the future?
 3. What are the internal environmental factors should the company improve (weaknesses) or remove to overcome competition in the market?
- b. In relation to the finance plan:
 1. Identify the funding sources used by the company.
 2. Indicate the advantages and disadvantages associated with these funding sources.
- c. In relation to the expansion plan:
 1. Identify the internal and external growth plans used by the company.
 2. Identify the possible problems or consequences associated with those growth plans.
- d. How do you think the company will evolve in the near future considering your answers to the previous questions (a, b and c)?

6. Assessment criteria:

The following criteria may be followed for the evaluation of the students:

Preparation of the case study (10%) - the teacher can calculate the grade based on the effort that the student has put into the preparation of the case study. Having an overview of the key elements of the case study could be helpful in this.

Situation/summary report (50%) - the workgroup/group should submit a written report (45%) and an oral report (5%) in which they respond to the questions raised in questions a, b and c.

Future proposal (40%) - the working group should submit a brief written report of no more than one page (35%) and an oral report (5%) in which they respond to question d.

7. Additional readings and references

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Case 3.6. Mobilife Technologies: Technology for a social purpose

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Abstract. Two computer engineering students, Leidia Martel and Aarón Lopez, decided to introduce a new type of software into the market. They had designed this software to make the lives of many patients with Alzheimer's and those of their caregivers more comfortable. Leidia's health care vocation and Aarón's meticulous technical work resulted in a perfect combination that led to the creation of Mobilife Technologies Ltd., a company which has become fully involved in today's society offering mobile device solutions to make daily life easier. The company has been strengthened as a result of the close collaboration with a research team from the university where they studied. Today, Leidia and Aarón have more than 20 months of tireless work behind them and, although it is in its early stages, the business has a promising future and their expectations continue to grow.

Key words: *Academic spin off, software development, social commitment, global market, human capital.*

Background and training of the entrepreneurial team

Leidia Martel and Aarón López decided one day that their final academic project, supervised by their teacher Abraham Rodríguez at the School of Computer Engineering, should not remain as merely a good project praised by the assessment board. So, after a major effort to finish their computer engineering studies, they joined various research projects at the University Institute of Applied Microelectronics in Las Palmas de Gran Canaria (IUMA). Encouraged by their teacher, Jose María Quinteiro, they became very enthusiastic about the idea of creating MobiAlz— software for patients with Alzheimer's that they themselves had designed and presented as the grand finale of their studies at the University. This software would help patients with Alzheimer's, which is a frightening disease that feeds on the minds of the elderly and erases their memories.

Leidia always wanted to study medicine, but various circumstances led her to focus all her efforts on a career that was gaining her attention and her curiosity: computer engineering. Nevertheless, her health vocation was so strong that it did not take her long to convince her friend that the best option for their final project was to focus on Alzheimer's patients- a group that was in need of solutions. So with the help of their tutor and inspired by the desire to "create something useful" combining medicine and computing, they started the project which has now become their business.

Initially the University did not provide any assistance, so they chose to develop their business based on Windows Mobile®, thinking that this would give them a quick and easy introduction into the market. But after a short period they discovered its impracticability and realized that it would not allow them to achieve the results they were pursuing. They soon discovered that the development of the product they had evaluated in the project they presented to the board had very few commercial possibilities and so they decided to discard their original idea in favour of a new Apple device interface. They produced a prototype to test on clinic personnel and Alzheimer's patients.

Originally the company was created to support one of several European projects that was being developed by the research group they were involved in and had been recommended to them by their tutor. As researchers with extensive experience and as PhD students from the University of Las Palmas de Gran Canaria, they formed part of the research team at the Division of Information Technology (Information Systems and Communications) of IUMA, making them the company's central axis of collaboration with the University.

Registered officially in July 2010, Mobilife Technologies was established as a partnership between Leidia and a personal friend from Ireland, whom she got to know by chance on one of the multiple forums for entrepreneurs that she regularly visited. This partner not only provided capital but also training and business experience, as well as extensive knowledge of the English language and culture in order to help conquer the non-Spanish-speaking market. This market is vital for the commercial aspirations of the company as it considers the North American market to be the principal focus of the project. Thus, when they were hired by a local company to develop and maintain a tourist guide they were forced to start up the firm in order to provide them with a stable turnover. However, they were sure about what their main activity should be: the development of software for mobile devices.

The company offers two types of service: customer orders, including maintenance, such as the tourist guide and Canadian wine tasting, and their own telecare service for the improvement of daily life and disease control and prevention. This latter service is the main vocation of the company, and some elements of it could be sufficiently competitive to be incorporated in Android® or Apple Store®, who demand that applications are posted by companies rather than universities or research institutes, forcing them to generate a trade name to operate within the market. The star products in this group are MobiAlz which offers support and specific services for Alzheimer's patients, another recent development for the control of patients with diabetes, and MobiSync, which allows for rapid development of applications that require synchronization between the web and mobile devices. In general, and as the partners themselves point out, *"the products are closely linked to health and to this region and the company's specialty is the development of mobile devices in general."*

Business performance and industry overview

One of the key elements of the business project is its fully developed distribution channel and its global scope achieved through Apple Store® and other world renowned brands in the field of software and utilities for mobile devices. This is especially important for the company's own product development, so most effort is focused on having good products and developers that allow them to create and design applications required by the market and to be competitive in the quantity and quality of services. As noted by the entrepreneurs, "there are thousands of competitors around the world in this line of business."

The founders of the firm recognise the potential of their star product. Alzheimer's is a global problem with 36 million sufferers worldwide. This figure is expected to rise to 115 million¹ by 2050. The company understands that their key market is America, with more than 5.3 million consumers willing to spend money on their health, as opposed to the domestic market. In America it is normal, when you reach a certain age, to pay more than €20 monthly for someone to check that you are still alive by making a simple telephone call, or up to €8000 monthly for a place in a residence for elderly people with some form of dementia. In Spain, where the public social security system provides more benefits, and where per capita income levels are lower, people receive these services for free and so they are not willing to pay more than necessary for them. However, as Aarón says, *"this situation is also changing slowly in Spain."* Thus, developed countries with poor social security systems, including the USA, offer an ideal environment to generate products and sanitary services valued by the client. This has forced them to refocus the business project with a view to the global market, especially the USA. They have revised the unrealistic prices² in their original business plan to fit in with that country. In addition, this approach will require a bigger effort not so much in investment (they costed the business start-up at approximately €7,300) as in human capital, making Aarón and the research team vital to the project partners. Nevertheless, while entering the global market may offer many opportunities, with such high visibility it could also create major threats.

Although a major restructuring is coming, at present the founding partner maintains a visible role as head of the company, and also deals with clients and carries out the administrative management of the business. She has seen the need for additional special training in the management a new business. The senior partner shares her knowledge of the English language market and the language itself, which adds both to the commercial relations of the company and to the translation and adaptation of software for the user, one of the main costs involved in product development. The productive function rests on Aarón, who primarily looks after programming or ‘puncturing codes’ as it is known in the jargon of the sector. Leidia looks after the ‘capturing of requirement’, or in other words defining the design that will be useful for end-users.

Given the great importance of software configuration, the need for a detailed knowledge of the target market for the final product requires that they continuously consult experts. For example, in the production of their star product they had to carry out in-depth interviews with researchers, doctors, daycare centres and Alzheimer’s specialists, not only in the Canaries, but also in the chosen market: the United States. Thanks to their relationship with the University of San Diego and their contact with the American research groups, they have obtained important information for further development of their product. This allowed them to visualize the future scope of the product ascovering not only patients who had already been diagnosed but those that have yet to be diagnosed. The aim was to provide a customized package of services including an alarm for relatives, the life book, the appointment book and GPS locaters, amongst others. They also help caregivers and family members suffering from the ‘burn-out’ effect, which results from the overwhelming load that the patient adds to their lives, by offering them an activity planning and patient supervision service. Their interest in generating a comprehensive service for actual and future patients forced them to analyse current competitors for each of these types of service. This analysis allowed them to discover important deficiencies that they have tried to incorporate into the services they offer, one of them being the technical difficulties that many users encounter with the current devices.

Although they have had contact with potential investors and business angels interested in investing in the business³, they consider their problem to be not so much one of finance or the the need to invest in infrastructure, but of time. They believe that they possess the technical skills required to generate good products and there are many people in their circle willing to collaborate and join the project. However, in their opinion, it is too early to expand. They want to consolidate their way of working and finish ongoing developments first. They have no lack of contacts either, as they maintain relations with interest groups and associations both in Spain and the United States⁴ which give them information and privileged relations. For the promoters of the project the key to its consolidation is in the time that they must invest to develop and test the prototypes before the applications are released into the market. In their own words, *“time is against us ... This is a highly competitive sector, technology is growing rapidly and software cannot be patented. There is no protection whatsoever in this market.”*

The agenda is clear; in the second quarter of 2011 the first models of their star product will hit the market. Soon they will be relying on MobiAlz and other projects emerging around it. They do admit that they are still working *“for the sake of the art”*. The awards won (–three in total, including, the prestigious Universia Foundation Award) provided them with the necessary capital to reaffirm their intuition about the viability of the idea and it has given them new entrepreneurial impetus.

¹ In Spain there are roughly 800,000 people affected by Alzheimer’s. It has the second highest number of sufferers in Europe.

² In order to attract consumers, irrespective of their purchasing power, they estimated a price in Spain that would not exceed €10 a month for the general use of the system.

³ In the Canaries there is capital available for investment through the funds generated from the Canary Island Investment Reserve, a special economic and fiscal framework.

⁴ In Spain: Fundación Reina Sofia, Fundación Alzheimer España or Confederación Española de Enfermos afectados de Alzheimer y otras demencias (CEAFA); In Europe: Europe Alzheimer’s Association, International Alzheimer’s Disease; In United States: Alzheimer’s Association.

Case 3.6. TEACHING NOTES

1. Overview (Summary)

This case study illustrates the development process of a new company working in the technological field. It presents basic details about the entrepreneurial team and the business opportunity, highlighting focusing on the fundamental role of the university and their research teams in the conception of the project. In addition, it provides important information regarding the role that every member of the team plays in the project, highlighting their contribution and expertise. The case study also reveals the key elements of the business model, demonstrating the importance of human capital and the decision taken to market the product through distribution channels other than their own. It illustrates the importance of market research and business planning. Market research supplies useful information about the sector and the target customers and guarantees useful contacts for the development of the project. The business plan, for its part, allows them to assess in advance the investment necessary and also the scope of activities in the start up of the business.

The main objective of this case study is to help the students to better understand the elements involved in the entrepreneurial process (i.e. the business opportunity, the entrepreneurial team, the target market, the business plan, networking, etc), and the dynamics that make up the initial phase of the business. Special attention is paid to the adjustment between the business plan and the general and specific environments. In addition, this case study also serves as an example of how time at university and the completion of academic study offer valuable opportunities for students to shape their own future employment.

2. Teaching/Training Objectives

In the discussion of this case the student should be able to:

- distinguish the elements that characterise the entrepreneurial process at the beginning of a firm's life
- develop the ability to analyse the sector and a specific operation using information not provided in the case study
- draw up a SWOT matrix for the project
- draw up a business model for this company and visualize the possible growth of this model in the long term

3. Intended courses and target audience(s)

The case study is intended for students interested in learning in more detail about the entrepreneurial process, as well as current and potential entrepreneurs, especially those with business development projects linked to research groups. It could be used in specific entrepreneurship courses or in matters related to strategy planning and market studies, in the areas of business organization, engineering and computer science, among others.

4. Suggested Training techniques (Teaching methods)

The case study must be given to the students prior to discussion so that they can read it carefully in order to find key elements and take their own notes about the mobile device industry, its products and services, the company itself and its founders.

The lecturer should cover the following stages in the teaching process:

1. Provide an overview of the sector and its products, ensuring that the audience understands the products offered for mobile devices and illustrate them with examples of possible applications.
2. Review, with the students, the key elements that make up this business set-up including the business opportunity, the entrepreneurial team and the stages to be followed in its implementation.
3. Create groups for discussions on points 4 and 5.
4. Ask students to reflect on two different aspects: on the one hand the environment in which the company develops and on the other hand, the business model adopted. The final reflection should focus

discussions on the degree of adjustment of the chosen business model and the environment in which it develops.

5. Draw up future scenarios for the company indicating how the original business model should evolve to accommodate possible changes in the industry.
6. Presentation (by the students) of the topics debated in points 4 and 5 by the working groups.

5. Questions (Topics) for discussion

The following questions may be debated in the working groups:

- a. In relation to the general and specific environment of the sector:
 1. What are the general environmental factors that may have a major influence either favourable or unfavourable on the growth of companies in the ICT sector?
 2. Determine the main competitors of this company on the international level.
 3. What factors of the specific environment can determine the future of Mobilife Technologies?
- b. In relation to the business model for Mobilife Technologies:
 1. What main areas of the business support the development of its own products?
 2. What role does the entrepreneurial team play in the shaping of the business model with regard to the development of their own products?
 3. Indicate the advantages and disadvantages for Mobilife Technologies in distributing its own product through Apple Store® or Android®.
- c. Finally, the students must reflect on:
 1. Taking into account the environmental factors outlined in a.1, how might the ICT sector evolve over the next five years?
 2. What changes to the original business model are necessary for the progress of the firm?

6. Assessment criteria:

The following criteria may be followed for the evaluation of the students:

Preparation of the case study (10%) - the lecturer can calculate the grade based on the effort that the student has put in. Having an overview of the key elements of the case study could be helpful in this.

Summary report (50%) - the working group should submit a written report describing the environment in which the company is developing and defining the elements which shape the business model of the company and the degree of adjustment needed. This will require answers to be given to questions a and b. The marks, criteria and format of the report should be set in advance by the teacher.

Proposals for the future (40%) - the working group should outline in a brief written report of not more than one page, its ideas on the possible evolution of the sector and suggested adjustments to the original business model in order to adapt it to these changes.

7. Additional readings and references

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Case 3.7. Augmented Reality Co.

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Abstract. Sydeney White was proud of the technology he and his co-workers had managed to develop. A few months after the company's foundation the first costumers arrived and, having managed to survive in the augmented reality market for two years they had developed their own state of the art technology and had become a major player in their home market. However, the company still needed to grow to ensure its survival and since their national market was close to saturation, new growth opportunities had to be found abroad.

Keywords: *new venture internationalization, augmented reality, business strategy.*

Note: This case study was written for the purpose of stimulating learning and discussion. The authors compiled it in November 2010. The individuals, events and difficulties referred to are real, but have been disguised reasons of privacy.

Introduction

Sydney White and his wife Lauren had a vision: they wanted to give a third dimension to all those pictures and images that seemed so flat and unrealistic. This could be done by increasing the utilization of stereoscopic view³⁴ and of the products associated with this technology. For this reason, in 2002 they decided to start their own business, Augmented Reality Co. (AR Co), with the ambition of becoming market leaders in Italy, offering products and services that their customers could use on a daily basis in both their professional and personal lives. Sydney was an expert in Computer Aided Visualisation (CAV) technologies, including 3D graphics and virtual reality. Lauren, on the other hand, had over 5 years experience as a partner in a 40-year-old real estate company where she was directly responsible for over \$15 million in annual sales. This background was complemented by highly developed negotiation skills, so she began managing human resources, marketing, and sales while Sydney was in charge of creating a library of software solutions and was also directly responsible for R&D and operations.

Early days

In order to get their business up and running the two entrepreneurs decided to write a business plan and enter it in a competition for new high-technology ventures. Through this competition they would be able to obtain vital resources for their new business, such as financing opportunities and the support of an incubator.

In the business plan they presented themselves as retailers of different kinds of products and services all utilizing CAV technology which they could procur based on costumers demand. They aimed to target companies operating in very diverse sectors such as industrial design, automotive, R&D, prototyping, architecture, design, medicine, chemicals, marketing, communication, publicity, construction, real estate development and promotion, teaching and tutoring, as well as research organizations, public administration, art foundations, shopping centres and luxury shops. The only thing this very diverse group of industries have in common is that all of them can benefit from the utilization of the stereoscopic system that allows 3D images to be viewed.

The main objective of the company was to improve the content of projects and presentations, accelerating the time to market and creating a new way to communicate. Although this was a very good plan there was one main

³⁴ A stereoscopic system which utilizes separate left and right images to provide realistic 3D depth perception

risk associated with their business idea: the market reaction to the company's products and the difficulty of understanding their use and the competitive advantage they provide. In order to overcome this risk a clear marketing campaign was one of the top priorities for the business.. This would be carried out through:

- partnerships with companies that commercialize synergic products
- participation in shows and expositions
- direct marketing
- utilization of opinion leaders.

They also carried out an analysis of their financial position in order to highlight their financial needs. This resulted in reduced outsourcing of all activities that were not considered strategically relevant³⁵. By implementing such a policy the company was expected to break even by the third trimester of operation. ROE was expected to be 34.7% in 2003, and 95 % in 2004. ROI was expected to reach 48% in 2003, and 27.9% in 2004, with a ROS of 48% in 2003 and 27.9 % in 2004.

The company also participated in a competition. The jury found their business idea very interesting and Sydney and Lauren won. As a result, they obtained support from a local incubator that provided ready access to subsidized facilities and business development resources vital to develop their new venture, such as an extremely valuable network of contacts that ranged from university professors to the main equity funds.

The first costumers and growth of the company

AR Co was set up in January 2003 as a privately held LLC, specializing in the end-to-end, customized development and delivery of advanced CAV solutions at competitive prices.

Initially, using only commercially available technologies, the company generated all revenues by providing CAV content and consulting services. They offered a complete array of services and solutions to meet the visualization needs of increasingly sophisticated customers:

- CAV content creation: image creation and/or rendering for use in commonly accepted media (e.g. brochures, websites). Most of these projects were outsourced to carefully screened contractors and AR Co's managers and staff assured quality control throughout the process.
- CAV systems: typical services may require high-end projection technology that can be enhanced by stereoscopy to create a truly immersive experience. AR Co managed to quickly become a technology leader in this field, developing a library of solutions, including a patent protected, low-cost stereoscopic projection system.

³⁵ Activities considered statagically relevant were those concerned with the development of technologies vital for the development of a competitive advantage

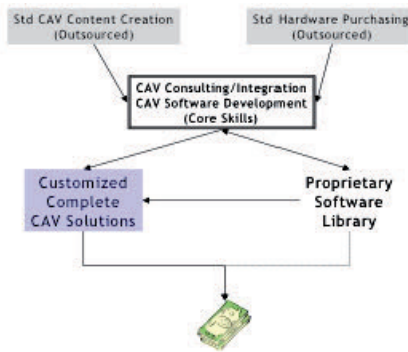


Figure 3. Initial revenue generating structure

Their sales model relied completely on the entrepreneurs' contact network and on word-of-mouth. In fact they were the only sales agents that the company had since there was no internalized sales function within the company structure. Through their sales structure, summarized below, the company provided a highly customized customer service with the development of the product based on the customers' needs and requests.

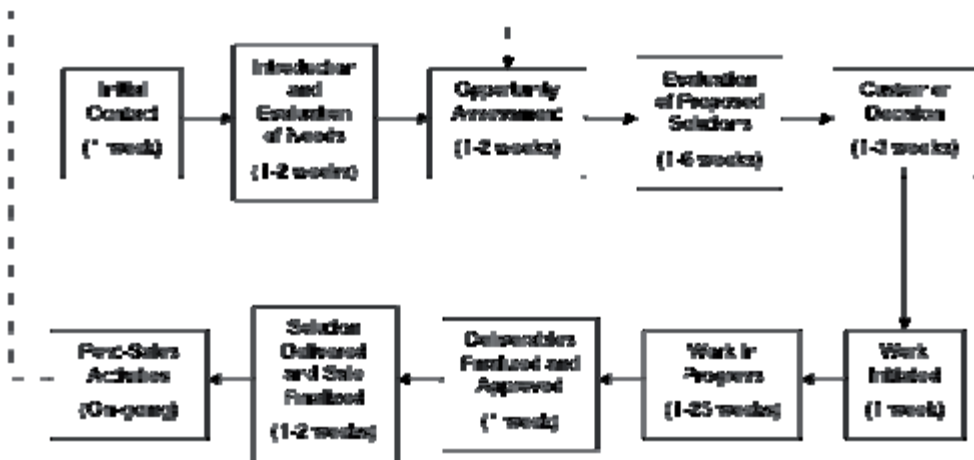


Figure 4. Initial sales model

Many clients expressed an interest in more sophisticated CAV solutions that were either too expensive, difficult to integrate, or simply not available from conventional sources. Sydney's expertise in this technology and his achievements in research and development of proprietary software made it possible for the company to begin satisfying these needs by integrating its own technologies with those commercially available. AR Co was able to build a collection of reusable CAV software tools that lead to more standardized products that can be licensed or packaged for sale in larger volumes and in different geographical areas as the market matures.

Business for the long haul

By 2005 AR Co was searching for new growth opportunities. The initial sales model, that had been successful in the company's early days, was not adequate to sustain its further growth and international development. They had to generate a bigger contact network but without taking on significantly more staff AR Co realised that they would not be able to provide the same type of service to an increasing number of customers.

Sydney knew that changes had to be made but he was not sure how to do this; he could modify his product offering by developing standardized product libraries that could be sold in greater volumes thus increasing significantly the number of customers; or he could maintain the existing sales model, reducing the company's growth opportunities and search for the further capital investment that this would necessitate.

Case 3.8. The risk of introducing a new product: “Building mixtures” Ltd.

Milena Kirova, PhD, University of Ruse

Introduction

Worldwide innovation is the main means of increasing the added value in the economy and creating and maintaining the national competitiveness of a company.

During an innovation activity there are many events, which are either part of the innovation or accompanying it, and which may be uncertain or indeterminate. This situation is characterized by risk. The risk is connected with the probability of getting less benefit from the innovation than expected. Risk analysis involves the determination of the risk factors, their measurement and reduction.

The tasks for risk management in an innovation activity come from the strategic aims of the innovation. Their fulfillment ensures that these aims are met. The main aims of risk management in an innovation activity are:

- predicting the emergence of negative factors which can influence the development and dynamics of the innovation process;
- assessing the effect of these negative factors on the innovation activity as a whole and on the result of the innovation;
- developing methods for risk reduction during the implementation of the innovation project;
- designing a system for risk management [Pavlov, 2009].

The risk factors are divided on the basis of:

- their origin (external or internal) their nature (industrial, investment, credit, engineering and technological, ecological, entrepreneurial, financial, trade, emergency, political [Balabanov, 2008]).

Some of the easily applied methods for assessing the different risk factors are based on well-known methods used in management and marketing research, such as SWOT analysis, the Delphi method, brain storming, rose of risks and expert opinion.

Risk reduction means decreasing the uncertainty of the external environment and the internal company structure, and increasing the accuracy of forecasting the importance of the risk factors. The most common methods for risk reduction are:

- risk avoidance which is based on an initial predetermined deviation of the project when a certain risk factor appears;
- risk sharing among the project participants and subcontractors in order to improve the outcome;
- risk diversification which entails dividing the investment on the principle ‘do not put all your eggs in one basket’;
- risk source localization which is used infrequently in cases when the sources of risk can be clearly and specifically divided for easier control;
- risk dissipation which involves dividing the common risk by uniting with other participants with a common interest in success;
- risk compensation which is used during strategic planning where reserves are created for compensation of future difficulties and uncertainties;
- risk insurance [Gabrovski, P., 2006].

Risk reduction is necessary during each innovation process.

Building Mixtures Ltd is looking for answers

Building Mixtures Ltd produces dry construction mixtures and heat insulation materials. Their current equipment is capable of producing a new higher quality product for insulating walls, but with higher cost due to new production technology and materials. The company management must answer the question: 'Is the risk of releasing the new product on the market acceptable?' To answer this question, the first step is to study the company profile and its ability to innovate and to carry out market analysis.

Building Mixtures is a modern company, established in 1994 which specializes in the manufacturing of packaged dry building materials, heat insulation and decorative materials made from expanded polystyrene (EPS) and integrated systems for outside insulation. It is located in a big city in north east Bulgaria, a region where there is intensive construction activity. Its products are sold successfully over the whole country and in neighboring Romania. Since its beginning the company has established itself as a reputable and reliable partner which is shown in its current results. This success is mainly due to the modern and completely automated and computer controlled production line for dry building mixtures. The non-stop work process and precision control allows production of 360 tons per day. In 2005 the company purchased technology for manufacturing of wall insulation made from EPS with an annual capacity of 15,000 m³.

The company sees its mission to produce materials for the construction industry, which are environmentally friendly and ensure comfortable living and working conditions. At the same time, the company tries to improve the effectiveness of those engaged in the construction industry – investors, builders, entrepreneurs, designers, foremen and workers. The company motto is 'To build consciously'.

The system of insulation, together with the accompanying accessories, as well as all other products, is certified by the National Construction Institute and complies with all Bulgarian and European standards. This is the result of a €100,000 investment in 2007 in a modern testing laboratory [<http://marisanbg.com/>].

The following interview with the company's executive director gives important information about its capabilities.

1. Is Building Mixtures an innovative company?

"In my opinion, it is not, but the market treats it as such, because it is flexible, modern and prosperous and responds to the market needs. We do not develop new ideas because it is expensive and risky. We use current new technologies which we develop further."

2. What is the company's strategy for innovation? Do you need innovation?

"Innovations are definitely necessary. The more one company develops the more it needs to invest in innovations. As far as the strategy is concerned – anything which ensures our leadership in the market is a good innovation which we want to have."

3. How do you finance the innovations in your company? Is there any government stimulus?

We finance the innovations 100% with our own resources. There are government funds but the access to them is complicated by slow procedures. By the time we actually use the resources it is possible that somebody else will have moved ahead of us. We think that the government needs to invest more in education, research and science for quality specialists and technology."

4. How much do you spend on financing innovations?

“In this country companies usually spend about 3-5% of their sales. We spend about 10%. This policy will continue while the company is developing. Once we reach a certain level we will reduce the innovative activities. This is a logical step.”

5. What are the innovative processes in the company and what are their risks?

“The first thing we do is to analyze the market and its needs. A serious threat here comes from misleading information resulting from poor research or too much optimism. A problem could be the changed market need or delaying a new product’s entry into the market place. Plagiarism is cheaper than research and can cause a lot of harm. Our marketing directs resources towards stimulating the product need. Another innovation which we introduced is our own software system, which few small companies have. Its advantage is that it is adapted to our processes so we do not need to adapt. An innovative approach is the training of customers in how to use our products effectively. We give our corporate customers information which does not exist in the market. Another approach is using students for project development. These projects are not always of sufficient quality and are risky, but at least we can use some of the ideas they generate.”

6. You won a gold medal for your insulating system at the Plovdiv International Trade Fair.

What makes it so innovative?

“The components of each system must be matched with the others. This system is designed so that when all components are combined they enhance the function of the other components and the system as a whole. In this case our company gives full warranty. If there are some issues with the system, the solution is found within our company which is what the customers like.”

7. Do you plan to have any other new innovative products in the near future?

“We are in the process of certifying such a product. It will be new for our country and we are the first to introduce it. The innovation lies in the material and the components. It has higher qualities as an insulating material and greater fire resistance. However, the price is higher. The risk here is whether the consumers will understand that the new product is going to save them money for heating and air conditioning and provide higher safety. We consider that the customers may be unwilling to use the product at the beginning but the time will come when things will turn in our favour.”

8. What will be the value of the new product for the market?

“The use of the new product will make the consumers special, and give them a higher quality of life. With the new product we will start educating the market. The end-users will learn that if they use our products they will get a return on their investment.”

9. Is the new product connected with the main company activity and its experience?

“Yes, it is connected. The new product may reach one third of our total production volume. The experience we have will also contribute a lot, as our staff will start production without the need for special training.”

10. Is it possible for the company to maintain its competitive advantage with this product?

“I think yes. If other companies do not offer the whole system, that is a big plus for us. We have information that only a few other companies are developing the product. We will offer it as a system – a full complex of everything necessary for the highest effectiveness.”

Questions and tasks for analysis and discussions

- A. Define the types of risk for the company by origin and nature.
- B. Arrange the risk factors by degree of influence.
- C. Assess the accepted level of risk in the company.
- D. Is the risk for product development acceptable?

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Case 3.9. How to develop, manufacture and market a technology product in an outlying European region: The case of “Dobontech”.

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Introduction: The case of Dobon’s Technology S.L. (DOBONTECH) describes the experience of a small team of entrepreneurs from the Canary Islands – *the geographical area of the company has a key role in this case study*-, who managed to carry out research and development activities as well as manufacturing and marketing their own product in the renewable energy sector. DOBONTECH was founded in 2001 by three partners, Paco, Julián and Anselmo. The purpose of this case study is to teach entrepreneurs about the external environmental context and barriers to an innovative product.

Background: DOBONTECH is an innovative R&D company specializing in Renewable Energy and Electromechanical Applications. Founded in 2001, its main activities are focused on developing innovative and competitive products and achieving technology transfer agreements with industry. It also provides technology consulting services and develops tailor-made services to the customer’s specifications.

DOBONTECH’s research activities have been focused specially on the photovoltaic Solar Energy field. Their most important contribution is the Two-Axis Sun Tracking System, TETRA-TRACK®, an advanced low-cost two-axis sun tracking system now available on the market. The research activities in the photovoltaic field also include a Very Low Concentration photovoltaic system and a Controlled Atmosphere Concentrator module for photovoltaic and thermal applications.



Image 1: TETRA-TRACK® installation

Due to its intensive research and development activity, and the need to get the device into production, in 2005 the company promoted the creation of an industrial branch together with industrial partners, Dobon’s Manufacturing, S.L., devoted to the manufacturing and quality control of the TETRA-TRACK®.

In addition, DOBONTECH participates in international consortia, promoting R&D projects, where several of its technologies are being tested or implemented. Their partners and customers include companies, universities and institutions from various countries.

The company has been very active in training activities, hosting students at national and international level. The training collaboration agreements reached by DOBONTECH include different research and training institutions in Spain, Germany and France.

The ‘trip’ to get ‘live’: Paco, Julian and Anselmo are very pro-active and creative persons, with new product ideas in the field of solar energy. They met in 1998 while working for a Research Institute in the Renewable Energies field.

Paco was born in Teruel (northeast of Spain) and moved to Tenerife in 1982 to work in a large Spanish company in the telecommunications sector. He worked for this company for more than 25 years. He is a very creative person, with many patentable ideas and long experience in the field of electronics and renewable energy. He became an entrepreneur at the age of 50, which shows that there is no age limit for starting up a company.

In 1998, Julian was working for a Research Institute on Renewable Energies in Tenerife. He was born in the Canary Islands and has a degree in physics and a high technical profile. He is a person with a proactive attitude, open to cooperation and looking for partnerships. Julian was 28 when they decided to start up DOBONTECH, and assumed the role of managing director.

Anselmo was working for the same Research Institute as an electronics expert, working on prototype development and product installation.

In March 2001, they decided to start up the company so that they could develop their ideas freely and because they felt they had a product in an expanding market niche. All of them had to learn on the job how to run a business and go ahead with their own resources. The company was set up in the Canary Islands Institute of Technology (ITC) incubator. This incubator, which has been running since 1999, aims to help technology based start-up companies in the initial years of activity. The incubator belongs to the EBN, European Business Center Network³⁶.

The challenge: how to develop, manufacture and market a new product. Since a very early stage, DOBONTECH’s activities have been focused on research, especially on the photovoltaic Solar Energy field. The most important contribution is the TETRA-TRACK® an advanced low-cost two-axis sun tracking system. The advantages of the system are that:

- It captures more solar energy for the same installed power than fixed systems (between 30% and 48% more energy annually, depending on location).
- It saves space for the same collected energy and a crane is not required for assembly.
- It improves inverter and pumping performance in photovoltaic applications.
- It reduces the number of photovoltaic modules for the same installed power if used under Very Low Concentration technology.
- It requires less foundation and is more wind stable at lower cost than pedestal tracking systems.
- No foundation is required if installed on rocky ground.

³⁶ EBN is now the leading non-governmental pan-European network bringing together 200+ Business & Innovation Centres (BICs), and similar organisations such as incubators, innovation and entrepreneurship centres across Europe www.ebn.be

Two-axis sun tracking system TETRA-TRACK®

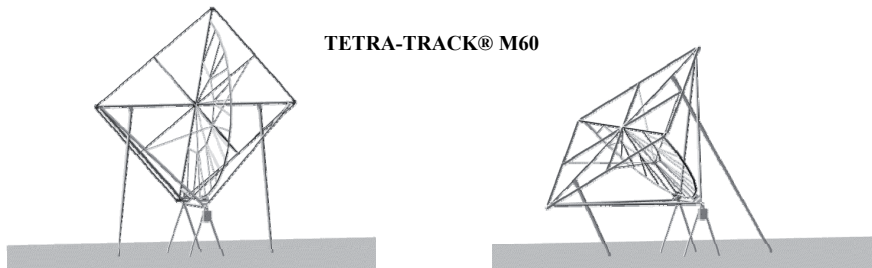


Image 2: TETRA-TRACK® system

The technology is ready for High Concentration photovoltaic module requirements. However, it is mainly used with the flat-plate photovoltaic module due to the lack of concentration modules on the market. Another prototype of 4 sq. m. using the TETRA-TRACK® concept is being tested with HCPV modules and is obtaining good results.

The promoters of the product intended initially to sell the development of the product to an industrial partner and in view of the difficulties that they found, they decided to set up their own manufacturing company. Between 2001 and 2003, the product began to be developed thanks to a number of R+D projects, including some European framework programme projects, in which the company was a subcontractor and a locally-financed project, which made possible the development of scale models and prototypes until they developed the full-size tracking system.

Thanks to their participation at different international congresses and events, they were able to make international contacts which allowed them to sell their products abroad, including installation and training.

Questions (Topics) for discussion:

- **Intellectual Property Rights:** In theory it is easier to sell a product with a patent. The TETRA-TRACK® is an innovative product, what are the advantages and disadvantages of applying for a patent? And the difficulties of licensing a patent?
- **Manufacturing:** Dobontech is based in the Canary Islands, an outlying region of Europe, located off the north coast of Africa. SWOT analysis of the manufacturing location.
- **Diversification:** Taking into account their expertise, what kind of product / services do you think the promoters can include in their catalogue?

Notes on the real results:

In this section you can find the rest of the story, what the founders of the company decided in connection with the proposed questions for discussion.

- **Intellectual Property Rights:** DOBONTECH applied for a patent. For a small company to apply for a patent is a considerable effort in economic terms. It is important to analyse carefully the patent application since it could be a two-edged sword. The product should generate income to cover the cost of maintenance of the patent. The patent process starts at national level and can be expanded to European and international level. Nowadays TETRA-TRACK® is under copyright.
- **Manufacturing:** The cost of manufacturing in the Canaries was too high, in terms of logistics, the raw materials, transport, etc. For the case of metallic structures, which are necessary for TETRA-TRACK, the Canaries do not have an iron and steel industry, which makes the logistics enormously more difficult and raises the costs involved. The product is manufactured by the company Dobon's Manufacturing S.L., based in Teruel (the city of origin of Paco, in northeast of Spain) and is 50% owned by DOBONTECH. They used existing facilities adapting them to the manufacturing of the product. This was possible as this region did have an industrial fabric related with metal working, which made sub-contracting easier. This industrial initiative was awarded IDEA'2002 price in the contest organised CEEIARAGON (European Center of Companies and Innovation from Aragon, Spain).
- **Diversification:** DOBONTECH expertise is focused on Research and Development projects and development of new products in the Renewable Energy field, Engineering of Renewable Energy Systems, Energy Audits and Energy Certifications and Technical Consultancy_developing products for third parties and engineering and development work on commission. Nowadays, DOBONTECH is an established SME with 6 employees.

More information about DOBONTECH at: www.dobontech.com

Case 3.10. Genesis PHARMA: The Development of an Entrepreneurial Giant

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Abstract: This case study maps the entrepreneurial development path of an emerging star in the Greek economy, with ambitious plans for growth across frontiers. Genesis Pharma was established in 1997, as a partnership between the second generation of family business entrepreneurs from the MSJ Jacovides Group and a charismatic managerial entrepreneur, with a view to marketing and trading innovative biopharmaceuticals in Greece. This report highlights how the company has embarked on aggressive growth strategies, building on a resource capability platform that is epitomized by a dynamic team with a real appetite for excellence. Genesis Pharma is an award winning company, repeatedly voted as one of best and strongest companies in Greece and beyond. Sales performance indicates that this 'small giant', with a turnover of €250 million, has graduated from the SME economy and is now spreading its wings to serve the international market.

Introduction:

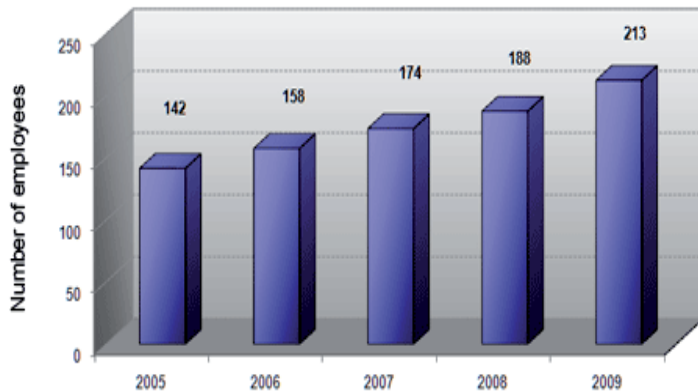
With its headquarters in Greece, Genesis Pharma has been a leading biopharmaceutical company since its foundation in 1997; The company was incorporated based on innovative business practices, far ahead of the existing Greek standards. Exploiting the opportunities arising from biotechnological innovations, Genesis Pharma was founded as a strong Greek company in a very prominent market.

The company has launched and marketed a unique portfolio of innovative biopharmaceutical products in Greece and Cyprus, principally within the specialty therapeutic areas of the central nervous system, haematology, nephrology and oncology. Many of the company's products treat rare chronic or life-threatening diseases and most of them address previously unmet or underserved clinical needs.

Genesis Pharma's consolidated turnover reached €255.2 million in 2009, and evidently outsmarts its rivals locally and European wide. The cornerstone of this successful growth is based on the company's policy to recruit and retain high-calibre professionals through an advanced and integrated selection process, training, development and reward policies and practices. During the last five years (2004-2008), the number of employees has increased by 33%. As of December 31, 2009 the number of highly qualified, full-time employees in Greece and Cyprus had reached 213.

Table 1: The growth experience

	2009	2008	2007	2006	2005	2004	2003	2002	2001
<i>Operating Revenue/Turnover</i>	255,254,942	223,449,867	172,411,224	155,524,080	132,533,569	111,857,843	76,451,909	34,101,866	19,165,467
<i>P/L before Tax</i>	37,114,401	31,616,052	33,598,970	37,900,004	29,903,680	25,499,854	19,114,289	7,590,591	2,854,232
<i>P/L for Period [= Net Income]</i>	23,983,555	23,028,382	24,667,834	26,302,035	19,920,913	13,115,630	12,040,192	4,955,727	1,731,804
<i>Cash Flow</i>	24,765,490	23,489,145	25,491,009	27,373,276	20,867,038	13,422,325	12,170,665	5,067,505	1,855,207
<i>Total Assets</i>	421,524,940	306,724,722	196,281,214	136,494,047	90,902,736	125,400,399	70,256,551	28,373,605	10,919,236
<i>Shareholders Funds</i>	54,157,657	45,416,469	43,755,064	39,802,818	31,808,134	15,410,075	10,448,606	3,298,837	1,665,608
<i>Current Ratio (x)</i>	1.28	1.39	2.18	1.56	1.52	1.17	1.16	1.13	1.15
<i>Profit Margin (%)</i>	14.54	14.15	19.49	24.37	22.56	22.80	25.00	22.26	14.89
<i>Return on shareholders Funds (%)</i>	68.53	69.61	76.79	95.22	94.01	165.47	182.94	230.10	171.36
<i>Return on Capital Employed (%)</i>	46.04	43.22	34.16	78.00	99.09	139.76	185.22	226.01	186.99
<i>Solvency Ratio (%)</i>	12.85	14.86	22.29	29.16	34.99	12.29	14.87	11.63	15.25



The focused launch of a new business model

In 1997, based on the vision of engaging in progressive and innovative commercial activity, Genesis Pharma took full advantage of new developments in pharmaceutical biotechnology, specifically in the field of the human genetic code (DNA) and produced innovative medicines for the treatment of previously untreatable medical conditions. These scientific developments in biotechnology were their inspiration for engineering a profitable business model

The business model utilises a systematic approach to generating profits and builds on four pillars; (a) it offers a **value proposition**, where the firm provides a solution to a specific customer need. Genesis Pharma, have been instrumental in channelling biotechnology pharmaceuticals to Greece to meet the emerging demands of state and private hospitals and other clinics; (b) Genesis Pharma has managed to build a **profit formula** by investing in the right infrastructure– value chain and effective routes to the market and pricing strategies; (c) **the cost of key resources**, namely the people, technology, facilities and equipment, involved in the process of creating and delivering value to the customers; (d) key **processes** are at the apex of their effective investment in human capital (i.e. the training, incentives and rewards structures), the budgeting, sales and service and other operational tactics which deliver value to the company.

The most important component of the Genesis Pharma business model has been the foresight and ability of the management to repeatedly identify new customer needs and to find innovative ways to meet the emerging demand from clients. The company has been fuelling growth by building a new range of products has into the core business, and constantly seeking new ideas to transform into winning business models which add value to the business and improve operational efficiency.

In Partnership with Biotechnology Innovations

Genesis Pharma was founded by a team of five Greek-Cypriots and is the first Greek pharmaceutical company to focus on the sale, marketing and distribution of specialized bio-tech pharmaceutical products. Genesis Pharma has developed strategic alliances with 13 leading companies in the global biotechnology market, such as Amgen, Biogen Idec, Celgene, Cephalon, Pharmamar, Shire and Vifor (for a list of Genesis Pharma's partners see Appendix 2). Genesis Pharma is a member of Emerging Biotechnology Enterprises (EBE), an exclusive

European biotech organization, and the European Federation of Pharmaceutical Industries and Associations (EFPIA).

In a nutshell, Pharmaceutical Biotechnology exploits human DNA and the laboratory technology of recombining molecules in order to develop pharmaceutical products for the treatment of chronic and rare diseases that, until today, could not be properly treated. Biotechnology-derived pharmaceutical products mimic the function of the human organism and have a specific mode of action, which is why these products have fewer side effects and offer better treatment of certain diseases. More specifically, biotechnology is a valuable therapeutic tool in the areas of the central nervous system, genetic disorders, hematology, nephrology, oncology, rheumatology, among others. So, biotechnology-derived pharmaceutical products are technology-based and laboratory-derived. Unlike classical pharmaceutical products they are neither organic nor clinical in origin.

Parental blessing from Michael S. Jacovides of the MSJ Group

The MSJ Group of Companies is a trading organization enjoying a leading position in the healthcare markets in Greece and Cyprus. In recent years, the company has expanded its activities in southeast Europe. The company's origin can be traced back to 1944 when it started as a pharmacy business in Nicosia, Cyprus.

Since then it has expanded rapidly in the pharmaceutical field as well as in all other sectors of the healthcare market. Today MSJ enjoys the reputation of a forward-thinking, progressive organization offering a complete range of products and services to its customers. MSJ maintains a strong, active presence in the market and contributes to the advancement and improvement of healthcare standards.

The Group's activities in Cyprus focus on the importation, marketing, sale, distribution and scientific support of an extensive range of healthcare products in the following sectors: pharmaceuticals, medical devices, laboratory equipment and supplies, dental health, consumer health, animal health and crop protection. The members of the Group in Cyprus include: M. S. Jacovides & Co Ltd (established in 1944), PharmNet Ltd (established in 2000), Vetagrica Ltd (established in 1977) and LifePharma Ltd (established in 2002).

PharmNet Ltd was established to offer services in logistics, distribution, and warehousing facilities to pharmaceutical companies operating in Cyprus. In 2005, MSJ acquired LifePharma Ltd, a company operating in Cyprus in the field of pharmaceuticals, dietary supplements, and babyfood and consumer health products. Since 1982 MSJ has had a significant presence in the Greek market with its affiliate, M. S. Jacovides Hellas SA, which is a well respected supplier of innovative, high-tech single use medical devices for hospitals.

When Genesis Pharma SA was established as a new affiliate in Greece in 1997, the company's main business activities focused on in-licensing, marketing, sales and distribution of specialized pharmaceutical products mainly stemming from biotechnology research. Today, Genesis Pharma is one of the fastest growing pharmaceutical companies in Greece. The ability to establish strategic alliances with leading American and European biotech companies, such as Amgen, Biogen Idec, Celgene, Cephalon, Shire and Vifor, has been a key factor in Genesis Pharma's success. In January 2000, the company established a wholly owned subsidiary in Cyprus- Genesis Pharma (Cyprus) Ltd. - with the aim of dominating the biopharmaceutical market in that country. To further reinforce its regional presence in south-eastern Europe, Genesis Pharma has established representative offices in Romania (2001) and Bulgaria (2004), has established a presence in the markets of Slovenia and Croatia and is currently entering the market of the former Yugoslav Republic of Macedonia.

The MSJ Group is a dynamic, modern and progressive organization with a leading position in most major specialized fields of private and public healthcare. It is the exclusive distributor of reputable and internationally known American, European, and Japanese firms which supply innovative, unique and cost-effective products.

Moreover the Group is expanding its activities in the Balkan countries with the objective of becoming a regional healthcare force in southeast Europe.

The MSJ Group employs over 300 people in Greece and Cyprus, mainly university graduates from a multitude of business and science fields. The personnel of the group are qualified and well-trained, working in a flexible and efficient organizational structure which applies modern productivity tools and business practices. In January 1999, the Group's operations for Greece and the Balkans relocated to newly acquired premises in Athens. The building, covering an area of 3,300 m², enhanced the Group's marketing activities in the region with a state-of-the-art in-house seminar room, a medical library and scientific laboratory facility. It represents an investment of €5 million and is located just off Kifissias Avenue, in the prestigious business district of Halandri in the northern outskirts of Athens.

In line with the Group's commitment to quality healthcare, the companies and the directors of the Group enjoy membership, and hold key positions, in a number of highly-respected international and local professional organizations. Memberships include : American Hellenic Chamber of Commerce; British-Hellenic Chamber of Commerce, Greek Japanese Chamber of Commerce; Hellenic Association of Scientific & Medical Equipment Suppliers (HELLASMES); Hellenic Association of Pharmaceutical Companies (SFEE); Federation of Greek Industries (SEV); Emerging Biopharmaceutical Enterprises (an EFPIA specialized group); Cyprus Association of Pharmaceutical Companies; Cyprus-American Business Association; Cyprus-French Business Association; Cyprus-Indian Business Association.

Vision and Mission of Genesis Pharma

In 1996, when the idea of setting up a company to exploit the opportunities opening up in the pharmaceutical biotechnology sector was being conceived, the founding partners wrote a simple statement based on the shared values of hard work, integrity, and commitment to excellence:

"To be the best Pharmaceutical Company in Greece"

Genesis Pharma's strong performance to date is a testament to this vision. The company also has a clear and well-documented mission statement in order to achieve further expansion by establishing:

"A prominent regional presence in Southeast Europe through partnerships with key biotech companies to ensure outstanding market performance"

Genesis Pharma's strategic objectives include establishing new partnerships and enriching the product portfolio, achieving rapid sales growth for newly launched products as well as further developing existing products.

In the words of Costas Evripides: *"Genesis Pharma's dynamic presence is the result of a series of factors that have shaped the company since its incorporation. Exploiting the opportunities of biotechnological industry, we set up the first solid Greek company in this very prominent market. In addition, our partnerships with top U.S. and European companies allowed us to bring to Greece highly innovative products covering significant patient needs. We do not rest on our success. We constantly look for new opportunities in new partnerships and aim at the enrichment of our portfolio of products. Furthermore, we are investing in new markets and more specifically in southeast Europe."*

Since its incorporation, the company has had a mission to grow via building a competitive edge, and by investing in outstanding employees, entrepreneurship and corporate social responsibility (CSR). Mr Costas Evripides, C.E.O. of Genesis Pharma noted:

"Human Resources is at the heart of each business. Recognizing its importance and the continuous opportunities it presents constitutes business progress. At Genesis Pharma, C.S.R is more than an astute business practice or a stand-alone programme. It is a system based on values that all our employees and partners adopt. It is part of our culture that embraces our practices and our people. C.S.R is a way of thinking and working."

The Entrepreneurial Journey

The following chronological review of key developments illustrates how Genesis Pharma has pursued growth. Directional growth includes new product development, new market development, overseas export development and vertical integration (in logistics and distribution). Means of growth include the organic development in the early stages of the business growth cycle, followed by alliances (licensing and distribution agreements) and selective acquisitions in the fast growth lane. As a testimony to its success, Genesis Pharma has collected prestigious awards for excellence that have further expanded its horizons.

It is axiomatic that in 2006, the firm was ranked number. 316 among the fastest growing European companies included in the Europe's 500 listing, the annual ranking of high growth, job-creating companies published by Europe's 500- Entrepreneurs for Growth. The CEO of Genesis Pharma, Constantinos Evripides was voted 'Dynamic Entrepreneur of the Year 2006' in the international 'Entrepreneur of the Year competition. Over more than a decade the firm has been repeatedly recognized as one of the best places to work in Greece and in Europe. More specifically, in 2005 Genesis Pharma was voted among the top 100 companies to work for in the 2005 Best Workplaces® competition in Europe. The wholly Greek company achieved this position following the evaluation of 1000 companies from 15 European countries that participated in the competition.

These awards are evidence that Genesis Pharma has embedded a unique corporate culture where all management and employees across hierarchies adhere to values and commitment for enduring success.

Table 1: Historical Milestones

- 1998**
 - Distribution agreement with Lafon (acquired by Cephalon) for Modiodal®
- 1999**
 - **Genesis Pharma (Cyprus) Ltd. is established.**
- 2000**
 - Distribution agreement with Amgen for Aranesp® in Greece and Cyprus
- 2001**
 - Genesis Pharma establishes a representative office in Romania
 - 'Avonex Distributor of the Year' Award, by Biogen for Avonex®.
 - Genesis Pharma (Cyprus) becomes a wholly-owned subsidiary of the company
- 2002**
 - Distribution agreements with Amgen for the distribution of Granulokine® and Neulasta® and Kineret®
 - Distribution agreements with Shire for Xagrid® in Greece and Cyprus
 - 'Avonex Distributor of the Year' Award, by Biogen for Avonex®.
- 2003**
 - 'CSR' Award (Annual National Advertising & PR Congress) for support of Multiple Sclerosis patients in Greece
 - The Amgen 'Excellence and Outstanding Sales Performance' award in Greece and Cyprus
 - Voted 8th best company in the 2003 'Best Workplaces® Competition' in Greece
 - 'Avonex Distributor of the Year' Award, by Biogen Idec for Avonex®.
- 2004**
 - Genesis Pharma establishes a representative office in Bulgaria.
 - Awarded 'Certificate of Recognition' at The Economist CSR Forum, for outstanding achievement in CSR and sustainable development.
 - Voted 7th in the 2004 'Best Workplaces® Competition' in Greece

- 'Avonex Distributor of the Year' Award, by Biogen for Avonex®
- 2005**
- Voted 5th in the 2005 'Best Workplaces® Competition' in Greece
 - Voted in the top 100 companies in 2005 Best Workplaces® Competition in Europe
 - 'Avonex Distributor of the Year' Award, by Biogen for Avonex®
- 2006**
- Distribution agreement with Alfacecell Corporation for ONCONASE®
 - Distribution agreement with IDM Pharma for Mepact
 - Distribution agreement with Celgene Corporation for Revlimid
 - Distribution agreements with Amgen for Mimpara and Kepivance
 - Distribution agreement with Shire for Fosrenol
 - CEO C. Evripides, voted as the 'Dynamic Entrepreneur of the Year
 - Ranked No. 316 among the fastest growing companies in Europe's 500 Listing
 - 'Avonex Distributor of the Year' Award, by Biogen for Avonex®
 - Voted 3rd in the 2006 'Best Workplaces® Competition' in Greece
 - Voted in the top 100 companies in 2006 'Best Workplaces® Competition' in Europe
- 2007**
- Renewal of distribution agreement with Biogen Idec for Avonex
 - Distribution agreement with Biogen Idec for Tysabri
 - Distribution Agreement with PharmaMar for Yondelis
 - Voted 4th in the 2007 'Best Workplaces® Competition' in Greece
 - 'Avonex Distributor of the Year' Award, by Biogen for Avonex®
 - 'Best Tysabri Launch Worldwide' for launch of Tysabri in Greece, by Biogen
 - Distribution agreement with CellSeed Inc. for Cell-Sheet
 - Renewal of distribution agreements for the products (Aranesp, Neulasta, Granulokine, Mimpara, Kineret, Kepivance) of Amgen
- 2008**
- Voted 4th in the 2008 'Best Workplaces Competition in Greece'
 - 'Avonex Distributor of the Year' Award, by Biogen for Avonex®
 - Renewal of distribution agreement with Celgene for Revlimid
 - Distribution agreements with Celgene for Thalidomide, Refludan and Vidaza
 - Distribution agreements with Biovitrum for Kineret and Kepivance
- 2009**
- Voted 8th in the 2009 'Best Workplaces® Competition' in Greece
 - Distribution agreement with Shire for Mezavant

In the midst of the crisis: up with the top ten



In October 2010, Genesis Pharma was included in the 'Strongest Companies in Greece' community by ICAP Group. This important acknowledgement verifies the company's creditworthiness and links it to the most powerful enterprises in Greece, which are ready to face the challenges of such turbulent times. The 'Strongest Companies in Greece' is a community of enterprises ranked for the highest credit ratings of ICAP Group. ICAP Group is recognized by the Bank of Greece as an External Credit Assessment Institution and by the

European Central Bank as an Accepted Rating Tool Source. Only one in ten companies in Greece meet the required criteria to be included in the community of Strongest Companies.

As Mr. Evripides states, "During the last decade, we have managed to create an environment which makes our people happy to work for us. In that environment, everyone is at the heart of our company's development, forging a powerful team. Thanks to this team, Genesis Pharma has managed to increase its sales nine-fold and triple its personnel. As a result, Genesis Pharma is today one of the leading pharmaceutical companies in southeast Europe. We thank our people and we are committed to continue as dynamically as we have done so far."

Performance Indicators for the decade

	2009	2008	2007	2006	2005	2004	2003	2002	2001
Operating Revenue/Turnover	255,254,942	223,449,867	172,411,224	155,524,080	132,533,569	111,857,843	76,451,909	34,101,866	19,165,467
P/L before Tax	37,114,401	31,616,052	33,598,970	37,900,004	29,903,680	25,499,854	19,114,289	7,590,591	2,854,232
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Total Assets	421,524,940	305,724,722	196,281,214	136,494,047	90,902,736	125,400,399	70,256,551	28,373,605	10,919,236
Shareholders Funds	54,157,657	45,416,469	43,755,064	39,802,818	31,808,134	15,410,075	10,448,606	3,298,837	1,665,608
Current Ratio (x)	1.28	1.39	2.18	1.56	1.52	1.17	1.16	1.13	1.15
Profit Margin (%)	14.54	14.15	19.49	24.37	22.56	22.80	25.00	22.26	14.89
Return on shareholders Funds (%)	68.53	69.61	76.79	95.22	94.01	165.47	182.94	230.10	171.36
Return on Capital Employed (%)	46.04	43.22	34.16	78.00	99.09	139.76	185.22	226.01	186.99
Solvency Ratio (%)	12.85	14.86	22.29	29.16	34.99	12.29	14.87	11.63	15.25

Peer Analysis

			Operating	Profit	Net	Profit	Cash	Current	Solvency	Total										
			Revenue	Before Tax	Income	Margin	Flow	Ration	Ratio	Assets	ROCE									
Median	LY		255,255	11,199	7,804	4.33	11,007	1.87	27.41	129,130	17.41									
ASTELLAS PHARMA GMBH	DE	2007	259,718	1	12,119	5	8,504	4	4.67	5	18,919	3	30.36	1	55.99	3	245,408	4	5.27	9
PFIZER B.V.	NL	2007	259,657	2	34,134	2	n.a.	13.15	2	n.a.	4.06	3	79.24	1	317,611	2	13,58	6		
COVIDIEN ITALIA S.P.A.	IT	2009	258,606	3	10,279	6	7,804	5	3.98	6	10,780	6	1.90	4	27.41	5	264,323	3	9.68	8
CC - PHARMA GMBH	DE	2009	257,002	4	17,585	4	12,736	3	6.84	4	13,213	4	n.a.		45.35	4	47,562	9	38.90	2
PFIZER AG	CH	2009	255,972	5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
GENESIS PHARMA S.A.	GR	2009	255,255	6	37,114	1	23,984	1	14.54	1	24,765	1	1.28	6	12.85	9	421,525	1	46.04	1
SPEM S.P.A.	IT	2009	255,007	7	5,163	8	3,552	7	2.02	8	4,658	8	1.14	8	17.59	7	89,020	8	38.14	3
GE HEALTHCARE EUROPE GMBH (A)	AT	2005	253,924	8	4,967	9	3,510	8	1.96	9	5,097	7	n.a.		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
BECTON DICKINSON GMBH	DE	2008	253,730	9	22,631	3	16,653	2	8.92	3	21,737	2	4.12	2	57.93	2	126,844	6	22.23	4
FARMACEUTICA COOPERATIVA PAV	IT	2006	253,557	10	993	10	179	9	0.39	10	1,256	9	1.17	7	17.69	6	115,345	7	17.41	5
LABORATOIRES ALCON	FR	2009	253,260	11	8,487	7	3,853	6	3.35	7	11,007	5	1.84	5	13.70	8	129,130	5	12.03	7

The competitive analysis involving Genesis Pharma and its close rivals (in terms of scale of operations and industrial classification) operating in the European market, highlight the superior performance of the Greek firm in the following parameters:

- it is the most profitable, with a profit margin of 14.5%;
- it offers a return on capital of 46%.

Evidently the firm is encountering 'growth pains'. This is clearly shown by its working capital deficiency which is symptomatic of the huge cash flow tied up in late payment. The firm has a high exposure to doing business with the state health system which is starved of public finance due to the fiscal crisis that has shaken the foundations of the Greek nation. This has resulted in an alarmingly poor insolvency ratio which measures a company's ability to meet long-term obligations. The solvency ratio measures the size of a company's after-tax income (excluding non-cash depreciation expenses), as compared to the firm's total debt obligations. It provides a measurement of how likely a company will be to continue meeting its debt obligations. Acceptable solvency ratios will vary from industry to industry, but as a general rule of thumb, a solvency ratio of greater than 20% is considered financially healthy. Generally speaking, the lower a company's solvency ratio, the greater the probability that the company will default on its debt obligations. What needs to be further clarified in this case is where the loans come from [as in the owner-managed firms shareholders provide other long-term finance] and refinancing capability.

The quest for a sustainable competitive edge

Genesis Pharma's achievement of enviable growth in this fiercely competitive arena is based on the following 5 pillars:

- pursuing a new business model – marrying resource capabilities with entrepreneurship to offer a value proposition to a diversified range of customers;
- building alliances with prestigious firms that have been leaders in shaping the innovation landscape through product development;
- ensuring operational efficiency across the value chain through huge investment in state of the art logistics that translates into economies and excellence in customer service;
- building a winning management executive team that fiercely supports their people, empowering them to realize their potential and get on with the job of building avenues of growth via sales strategies;
- making corporate social responsibility a priority so that the company cares for the community of stakeholders and the environment.

Growth drivers and pillars of competitiveness

The company's main strategic objectives focus on establishing new partnerships, enriching the product portfolio, achieving rapid sales growth for newly launched products and developing existing products.

Genesis Pharma is planning further expansion in the Balkan area, as well as investigating potential new strategic alliances and late stage product development.

From an opportunity to a business model

In Greece, in contrast to most European countries, there is lack of institutional strategic vision to plan for the development of pharmaceutical biotechnology, and thus there has been a dearth of indigenous innovations. Genesis Pharma's initiative to take advantage of opportunities arising from biotechnological products is significant and offers hope to many patients in the country.

Alliance-based growth

The company's capabilities and expertise have been essential in positioning Genesis Pharma as a partner of choice for the sale and marketing of biopharmaceutical products in Greece and in building successful long-term relationships with leading multinational biopharmaceutical companies. The company continually seeks new products which leverage its core strengths and complement its product portfolio.

Operational excellence

The Genesis Pharma Infrastructure is characterized by operational efficiency that delivers value across all phases of the value chain, from operational to support activities:

- **Business Development:** focuses on identifying, evaluating, and in-licensing late stage product candidates on or before FDA and/or EMEA approval;
- **Medical Department:** provides scientific support to, and works closely with the medical liaisons within the business units and is involved in the administration of local post-marketing authorization (Phase IV) clinical trials for the company's pharmaceutical products;
- **Regulatory Affairs Department:** this hugely important department closely follows the Greek regulatory environment and ensures that the company's entire product portfolio is managed in accordance with EMEA as well as with national and local regulations. The Department cooperates closely with the Legal Department and liaises directly with the Business Units. Additionally, the Regulatory Department is in close collaboration with the International Regulatory Affairs Departments of all Genesis Pharma's partners in order to ensure that all regulatory requirements are fulfilled and acts as a link with local regulatory authorities. The Department is also responsible for pharmacovigilance activities, including reporting of adverse events to the Greek health authorities according to local and European requirements and maintaining data bases of safety information;
- **Logistics:** Genesis Pharma's Logistics Centre, managed under strict EMEA "Good Distribution Practice" standards, is located at Glyka Nera in the northern metropolitan area of Athens. It is a modern ISO 90001-2000 BVQI/UKAS-certified facility able to store, handle and transport temperature sensitive products and dispatch orders throughout Greece within 24 hours. The Logistics Department is in charge of importing, handling and distributing all biopharmaceutical products to hospitals and wholesale distributors. Logistics are carried out by using the industrial ERP software SAP R/3, which enables continuous inventory monitoring and full traceability of dispatched pharmaceuticals: batch, quantity, destination and time of delivery.

Its our people: human capital and business democracy

Genesis Pharma, strongly associates business advancement and human development as they believe that people are the driving force for business success. Therefore, they aim to attract and retain talent as well as to create a working environment where everybody can unleash their potential. They have pride in their leading position in the marketplace, and as a place to work. The foundation for the development of a pleasant working environment is based on the following axioms: respect, trust, equal development for creative opportunities, continuous training, gratification and rewards and attractive remuneration packages.

The human resource programme of Genesis Pharma is based on a commitment to:

- the development and reward of our employees within an environment of fairness and equal opportunities;
- the support of the family, working mothers and work-life balance;
- the constant concern for the health and safety of our employees and
- the moulding of a pleasant working environment.

In Genesis Pharma they invest in their employees' continuous educational and professional development with a variety of benefits and practices, paying significant attention to rewards within an environment of meritocracy. More specifically, the company covers 60% and 80% of the fees for undergraduate and postgraduate studies respectively, while this rate rises to 100% for foreign languages and PC studies. Moreover, 33% of the employees who have been recruited since the company's establishment have been promoted, while 40% of the employees are women.

Genesis Pharma supports employees' families with several benefits such as: wedding gifts, full salary during maternity regardless of insurance, rewards for children who succeed at university, while for working mothers they provide extra pay for the costs of childbirth, nursery until the child reaches 3 years old and five extra days of annual leave for three years.

Finally, they promote the health and safety of employees with a range of benefits including additional health insurance for them and their families, full cost of an annual preventive health check up, etc. Moreover, the employee-awareness programme for health and safety issues includes presentations and talks by distinguished professionals and institutions on critical issues such as cardiovascular recovery, smoking and cancer. These are all well attended by the employees.

Corporate Responsibility

Genesis Pharma has continuously tried to provide Greek patients with branded biopharmaceutical products that could substantially improve their quality of life - products that are valuable assets to the medical community and can give hope to thousands of patients suffering from rare, chronic or life-threatening diseases. For any pharmaceutical company, business activity cannot be separated from CSR; indeed it constitutes a core element of their business philosophy. The CSR is geared towards the medical community and patients, but also towards their partners, employees, the community and the environment.

Through CSR initiatives Genesis Pharma strives to make their business more sustainable, by offering products of high quality, safety and effectiveness. The company has adopted and closely follows the codes of practice of the SFEE (Hellenic Association of Pharmaceutical Companies) and the EFPIA (European Federation of Pharmaceutical Industries and Associations), pursuing business policies and procedures that are in compliance with best practice, offer good working environments for staff and minimize the environmental footprint. Some of the company's CSR initiatives include:

- recycling and conserving natural resources such as paper, aluminum, printer cartridges, electronic and electrical devices, corporate and old domestic appliances;
- using energy- saving lamps;
- paying fees to the Hellenic Recycling Corporation for the primary and secondary packaging materials that become waste after the release of its products;
- using 'Green' IT with Blade technology which reduced electricity consumption by 15%;
- participating in the 'Earth Hour'.

Finally, Genesis Pharma invests in sales and marketing. Their efforts focus on the early stage of the marketing process following a product's initial launch, with the goal of achieving deep market penetration to grow sales and

quickly establish and maintain a leading market position. When formulating a marketing strategy, healthcare standards, pricing, reimbursement systems, fiscal and legal policies are all taken into consideration. This approach enables the firm to efficiently market their products to various niches within the Greek biopharmaceutical market.

The investment in highly-trained, qualified sales and marketing personnel enables the company to increase awareness and understanding of each product's efficacy by providing detailed information to medical professionals, through frequent product presentations and tailored programmes, in accordance with EMEA and local regulations.

To support patients, Genesis Pharma employs a team of healthcare support staff, consisting of qualified nurses, which operates in almost all major Greek cities and the provinces. This programme aims to give patients psychological support as well as to provide information on the progress and technical nature of their treatment.

Quo Vadis: The CEO and Board of Genesis Pharma aim to continue their entrepreneurial journey by marrying a family approach to business with an aggressive approach to growth. Their specific goals are:

- expansion in all Balkan countries; in-licensing of new biotechnology products;
- penetration in the area of biotechnology clinical research and development, focusing on Greece and expanding to all countries of southeast Europe

On the financial front, they contemplate a flotation on the Athens Stock Exchange, when the euphoria returns to the stock market. This will enable the company to leverage growth with alternative sources of capital and be in a position to engineer share option schemes to reward loyal employees- their Trojan troops!

APPENDIX 1: Board of Directors

Alex Jacovides (President)

As President of the BoD and a founding member of Genesis Pharma, Alex Jacovides is responsible for its Strategic Development. Born in Nicosia in 1954, Alex Jacovides has a Bachelor and a Master of Science Degree (BSc and MSc) in Chemical Engineering with distinction from Imperial College, London. With impressive experience and knowledge in management (having served as Production Manager and General Manager in multinational corporations), he is a Member of the Board of the Jacovides' family Group of Companies in Greece and Cyprus and a Non-Executive Board Member of Ellinas Finance, a company listed on the Cyprus Stock Exchange.

Aris Jacovides (Vice-President)

Aris Jacovides is Vice-President of the BoD and one of the founding members of Genesis Pharma; born in Nicosia in 1956, has a Bachelor's (BSc) degree in Industrial Chemistry from City University, London and holds an INSEAD MBA. Aris Jacovides is in charge of Business Development for the Jacovides Group of Companies, particularly in the area of medical devices and led the Group's expansion into the Greek market in 1982. He is President and CEO of M.S. Jacovides Hellas, a marketing company in hi-tech medical devices, and a Board Member of the Jacovides' family Group of Companies in Greece and Cyprus.

Costas Evripides (Chief Executive Officer)

Costas Evripides is a founding member and Genesis Pharma's Chief Executive Officer. Born in Nicosia in 1953, Costas Evripides has an Athens University (ASOEE) Economics degree and an MBA from the London Business School. Costas Evripides has a long experience and in-depth knowledge of the pharmaceutical sector, having held senior management positions in multinational companies. He is also a Vice President of the Hellenic Association of Pharmaceutical Companies (SFEE) and a member of the General Council of SEV, the Federation of Greek Industries. Since 2000, he has been elected President of the London Business School Greek Alumni Association, of which he has also been a founding member. He is a Non-Executive Board Member and co-founder of GENESIS Pharma.

Sotiris Jacovides (Non-Executive Director)

Sotiris Jacovides was born in Nicosia in 1950 and graduated from Ealing University, London with a degree in Business Administration, and is President and CEO of the Jacovides' family Group of Companies in Cyprus. Sotiris Jacovides was the first President of the Cyprus-American Business Association (CyABA) and remains, to-date, a Board Member. He has served as President of the Cyprus Pharmaceutical Companies Association (SFEK) and currently is a Board Member. He is a Non-Executive Board Member and co-founder of Genesis Pharma.

Savvas Jacovides (Non-Executive Director)

Born in Nicosia in 1952, Savvas Jacovides has a Bachelor (BSc) in Economics from Ealing University, London and holds a Master (MA) in Business Administration from PCL University in London. He is a Board Member of the Jacovides' family Group of Companies in Greece and Cyprus. He has also served on the Board of APOEL, Cyprus' largest athletics association.

APPENDIX 2: The Partners

Genesis Pharma's strong track record of building long-standing partnerships with some of the leading multinational biopharmaceutical companies has been a key factor in the company's success. The company has entered into agreements with the following companies for the sale and marketing of biopharmaceutical products:



www.alfacell.com

Alfacell Corporation is a biopharmaceutical company focused on the discovery, development and commercialization of novel therapeutics for cancer and other life-threatening diseases, using its proprietary ribonuclease (RNase) technology platform.



www.amgen.com

Amgen, the world's largest biotechnology company, discovers, develops, manufactures and markets important human therapeutics based on advances in cellular and molecular biology and medicinal chemistry.



www.biogenidec.com

Biogen Idec Inc. was created in 2003 by merging two of the world's leading biotech companies: Biogen Inc. and IDEC Pharmaceuticals Corporation. The merger fused the complementary capabilities of both companies in therapeutic focus, R&D and manufacturing, global infrastructure and financial strength. Biogen Idec is dedicated to creative science and intends to pursue growth by discovering, developing, manufacturing and selling original products and through strategic alliances by becoming the partner-of-choice in biologics development. Product and development programmes address a variety of key medical needs in oncology, neurology, dermatology and rheumatology.



www.cellseed.com

CellSeed is a biotechnology innovator focused on novel surface and cell culture products. CellSeed is dedicated to provide promising and innovative solutions for tissue-engineering through development of novel cell harvest methods and 3-dimensional living tissue replacement products for "Cell-sheet therapy" and regenerative medicine to improve human quality of life.

A CellSeed's regenerative living cornea epithelial cell-sheet is currently under clinical development for the treatment of Limbal Stem Cell Deficiency (LSCD), which results in persistent epithelial breakdown, superficial corneal vascularization, chronic discomfort and impaired vision. The unique regenerative medicine technique developed by CellSeed and its collaborator, the Tokyo Women's Medical University called "Cell-sheet engineering" avoids the problems of donor shortage, graft-versus-host disease and transplant rejection and the need of sutures for engraftment.



www.cephalon.com

Cephalon specializes in drugs to treat and manage neurological diseases; sleep disorders, cancer and pain, and is one of the world's fastest-growing biopharmaceutical companies. With 2100 employees, an expanded international presence with operations in the United States and Europe, and a diverse product portfolio, Cephalon is poised for continued growth. From researching target molecules to advancing late-stage compounds, Cephalon contributes to scientific understanding, while preparing a new portfolio of treatments.



www.celgene.com

Celgene Corporation, headquartered in Summit, New Jersey, is an integrated global pharmaceutical company engaged primarily in the discovery, development and commercialization of innovative therapies for the treatment of cancer and inflammatory diseases through gene and protein regulation.



www.eisai.com

Eisai Inc. is a U.S. pharmaceutical subsidiary of Eisai Co., Ltd., a research-based human health care company that discovers, develops and markets products throughout the world. Eisai focuses its efforts in three therapeutic areas: neurology, gastrointestinal disorders and oncology/critical care. Established in 1995 and ranked among the top-20 U.S. pharmaceutical companies (based on retail sales), Eisai Inc. began marketing its first product in the United States in 1997 and has rapidly grown to become an integrated pharmaceutical business with fiscal year 2007 (year ended March 31, 2008) sales of approximately \$3 billion, including the results of the acquisition of MGI PHARMA, INC.



www.pharmamar.com

PharmaMar is the world's leading biopharmaceutical company of the Zeltia Group, committed to advancing the treatment of cancer through the discovery and development of new marine-derived medicines. PharmaMar's headquarters are in Madrid (Spain) and its laboratories in Cambridge (US). Pharmamar was founded in 1986, with the vision of exploiting the great potential of the oceans as a source of novel medicines for improved cancer treatment. PharmaMar has a unique collection of 55,000 marine organisms obtained from expeditions around the world. 700 new chemical entities have been discovered and 30 new families of compounds have been identified. PharmaMar also has a rich pipeline of preclinical candidates, and a strong R&D program.



www.shire.com

Founded in 1986, Shire Pharmaceuticals Group plc is a global specialty pharmaceutical company marketing products to specific customer groups. Shire's research and development focus is on late stage projects in areas where the company has a commercial presence. Sales and marketing is a core Shire competence, where a relatively small but high quality sales force is able to maximize sales by effective targeting. Shire avoids involvement in the highest risk area of discovery research for small molecules or research into genomics, combining investment in product development with careful attention to risk management.



Swedish Orphan Biovitrum (Sobi) is a Swedish based pharmaceutical company with an international market presence. The product portfolio consists of some 60 orphan and specialty pharmaceuticals. Sobi has an emerging late stage clinical development orphan and specialty pharmaceutical pipeline. Sobi has a strong business development track-record and compelling product development and manufacturing capabilities. Sobi has access to about 60 orphan or niche specialty pharmaceuticals. Several late stage rare disease clinical development protein pharmaceutical programs and a progressing pre-clinical development pipe-line may provide exciting additional future product portfolio opportunities that can deliver patient and shareholder value. Focus areas are: hemophilia, inflammation/autoimmune diseases, fat malabsorption, cancer and inherited metabolic disorders.



www.takeda.com

Takeda is a research-based global pharmaceutical company. It is the largest pharmaceutical company in Japan and one of the global leaders of the industry. Takeda promotes enhancing R&D pipeline, while concentrating its management resources to the four core therapeutic areas: lifestyle-related diseases, oncology and urological diseases, central nervous system diseases and gastroenterological diseases. Takeda's in-house ethical drugs are marketed in around 90 countries worldwide and are recognized as the brand in major countries worldwide.



Vifor (International) Inc. is the world leader in the market for pharmaceutical iron products. Based in St. Gallen, in the North-Eastern part of Switzerland, the company supplies distributors or licensees in around 80 countries with active compounds and oral and parenteral iron products. Vifor (International) Inc. focuses on its core competencies of developing, producing and marketing pharmaceutical iron products.

Case 3.11. In the horizon of authenticity: Oleastro Enterprises Ltd.

Panikkos Poutziouris, CIIM and Manchester Business School
Skevos Evripidou, University of Cyprus
Milena Marinova, University of Cyprus

Abstract

This case reviews the entrepreneurial development of Oleastro Enterprises Ltd., a Cyprus based family business, that has been a pioneer in the organic olive oil market. As micro-enterprisers, operating in the young organic market in Cyprus, its founders have managed to develop an integrated production and trading business model that has been praised for its innovative practices. The profits from the cultivation, production and trading of organic olive oil and related by-products have been invested in the promotion of a new business model - a recreational and educational Olive Park. The fledging enterprise is now exploring new venture ideas that will contribute to both the further operational efficiency of the core business and diversification via growth and alliances with other local artisan ventures, producing related traditional products. The Oleastro entrepreneurial team manages their businesses along core and emerging growth horizons.

Profile of the business

Oleastro Enterprises, www.oleastro.com.cy, was founded at the beginning of the new millennium by the Ellinas family – copreneurs Lina and Andreas and their two children, Daniel and Natalie. Oleastro's line of business incorporates production, extraction, bottling, trading of top quality organic olive oil, and special interest/agro tourism.

The Ellinas family had no previous experience in the field of olive oil processing, but they were endowed with a piece of land and respect for the Mediterranean love affair with olive trees. Thus, they planted hundreds of olive trees and, as their orchard was growing, they decided to marry tradition and entrepreneurship; Oleastro was launched. The word 'Oleastro' is derived from the ancient Greek word for 'wild olive tree' that can still be found in many areas of Cyprus. Lina and Andreas, impressed with the back to the future green enterprisers, focused their agro-farming ventures on the organic olive oil market.

The early growth of this the small dynamic company was based on the following vertically integrated ventures: harvesting of olives, processing and bottling of olive oil, fabrication of olive oil by-products and, of course, trading olive oil and other related artisan produce. In addition to the Ellinas family (four people) and two full time employees, seasonal staff was recruited, according to fluctuating needs.

The Oleastro Process

The principal guidelines for organic production are to use materials and practices that enhance the ecological balance of natural systems and that integrate the parts of the farming system into an ecological whole. Thus, during cultivation no chemical products are used. Olives are harvested in the manual way and the olive oil is extracted on the very same day in the ecological (two-phase) method. The ecological which is mill certified to a number of standards (Appendix A lists all the certifications of the process and the products) uses millstones. In this way, Oleastro organic olive oil is not only extracted in the most hygienic way, but its nutritional and

organoleptic properties (taste, aroma, and colour) remain unchanged. In France, for example, olive oil crushed with millstones is sold at a much higher price than other oils.

The organic olive oil is stored in stainless steel containers at controlled temperatures (12⁰-18⁰C). Bottling is also carried out in the company's own bottling facilities. Oleastro organic olive oil is sold in green bottles with a narrow necks that prevent light and air penetration, which spoil the product.

Finally, the 'waste' - the leaves, crushed kernels and skins - are recycled in the form of organic compost to feed the trees. Part of this is also dried out and used as fuel for the water boiler as an alternative form of energy.

Oleastro organic olive oil comes in a variety of sizes and fancy packaging, plain or with herbs, and also in combination with other traditional products (e.g. olives, tapenade, carob honey, balsamic vinegar etc). Premium pricing is a very important factor for the company to cover the higher cost of producing organic olive oil. Although, the Oleastro oil is tailored for the higher end of the market, the firm initially aimed to keep pricing stable so as to gain brand loyalty from the customers.

Pillars of success

The key factor in the Oleastro success is the enthusiasm, commitment and efficiency which characterises the founding team. The Ellinas family is the driving force of the company. They had no previous experience in the field of olive oil processing. On the contrary, their background and work experience was that of city dwellers. By the time they took the decision to work in this emerging sector, they had spent a lot of time studying and visiting similar ventures in Cyprus and abroad. They built their knowledge base and now know everything about organic olive oil production.

With creativity and ethos, they embarked on the idea of promoting 'the civilization of the olive tree', which became the mission of their company. The sense of synergy between the family and the fact that they had faith and enthusiasm in their business concept gave them courage to proceed with their innovative idea. Their entrepreneurial road map had a clear goal, a business plan and an explicit clear action plan for all the stages of growth.

It is axiomatic that the founders not only enjoyed access to enterprise support, networking and social capital, but also had considerable business acumen. Lina has got four MSc's and has been nominated for various entrepreneurial awards in Cyprus and abroad. Andreas, is a successful businessman, who owns a traditional restaurant, an Internet café and other similar activities in Limassol.

Here are some of the accolades they have received: in 2003, Lina was nominated and shortlisted for the International Award for Rural Businesswomen; in 2005, she was selected by the European Chamber as a woman entrepreneur in male dominated areas; in 2007 she was voted the Young Woman Entrepreneur of the year by the Cyprus Chamber; In 2006, Oleastro was selected as a successful SME (by the Cyprus Chamber) for EU SME day; in 2008 they received the International Quality Award (for olive oil); In 2009, Oleastro Enterprises Ltd was a candidate for the In-Business Awards in the SME category.

Entrepreneurial Developments

Oleastro Enterprises Ltd. is a family business, committed to promoting 'the civilization of the olive tree', as well as sustainable rural development. As a result, the company has not only introduced the first organic olive oil Oleastro in the Cyprus market, but has expanded their portfolio of business activities, to create the pioneering 'Oleastro House of the Olive.'

This thematic park offers an experience blended with ergonomics, history and tradition; there is an ecological millstone olive mill, an olive oil museum, a gift shop specializing in olive products and a visitors' centre. The Oleastro House of the Olive ' ' is situated 3 km from the village of Anogyra, close to the wine route and close to touristic attractions (e.g. Greco-Roman Kourion, Paleo-Pafos, the birthplace of Aphrodite etc.). It is a 30-minute drive from the thriving city of Limassol (an international business centre and the home of many shipping companies) and from the cosmopolitan Pafos, famous for the upmarket tourist resort.

At a later stage, the Olive Park was created which is the only olive park in the world where actual farming and olive oil production take place in addition to exhibits and displays. For the kids, there is a playground, artist's corner or they can take a ride on ponies in the park. The organic café/restaurant serves traditional homemade Cypriot meals.

Today, Oleastro has fans of all ages and is a favourite destination for local people, schools, and other visitors. Moreover, it hosts and organizes seminars and events like art exhibitions and literary and cookery evenings.

The latest meta-growth development includes the promotion of local artisan produce (e.g. carob syrup and other carob products, olive oil cosmetics, etc.) that is included in a gift bag with the company logo and sold in their gift shop and other points of sales (e.g. airports, souvenir shops, organic stores, etc.).

The Growth Horizons

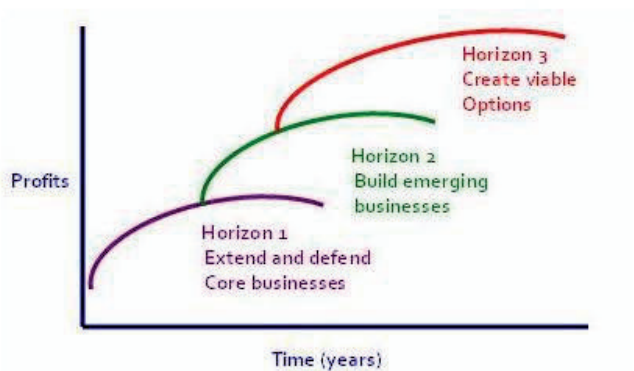
The development strategy of Oleastro follows the three horizons framework featured in 'The Alchemy of Growth' (1999), which provides a structure for innovation inspired growth.

Building the Core Business: Horizon one represents Oleastro's core businesses that provide the greatest profits and cash flow. Here, the owner-managers of Oleastro have concentrated strategic effort on how to improve performance via scaling up operations to allow for better performance. The challenge has been how to get more value added growth, reaching production efficiency through economies of scale, utilization of its production and distribution capabilities, and breaking out from doing business locally to deliver its products beyond national frontiers. As a premiere quality product, with organic certification by LACON and HACCP for food safety and hygiene, as well as registrations with ISO9001:2000 for quality and ISO14001:2004 for environmental protection, the firm is naturally market leader in Cyprus. Now it is spreading its wings to do business across frontiers in Greece, the UK, Japan and Germany

New Business Models: Horizon two encompasses emerging growth opportunities, including rising entrepreneurial ventures. Oleastro has invested in a new business model - the Olive Park - which contributes to a new revenue stream but which, through the enlarged operations, will also support the performance of the core business.

New Venture Ideas: Horizon three involves the exploration of new projects and ventures that will allow the development of emerging new business.

More specifically, Oleastro capitalises on its brand and embraces other local artisan ventures producing traditional products, such as carob syrup, to cooperate in the promotion of Anogyra authentic produce. Oleastro sources these authentic delicacies from micro-enterprises in the region and integrates them into the 'Oleastro Anogyra gift bag' which is distributed to a plethora of points of sales, including the Oleastro gift shop.



Source: Baghai, M., Coley, S. and White, D. 1999 *Alchemy of Growth.*, Orion Business Books

The Oleastro entrepreneurial team manages businesses along all three horizons concurrently. The horizontal axis of this framework demonstrates the innovation cycle by which businesses and ventures are developed; from horizon two to horizon one, or from horizon three to horizon two. On the vertical, the model represents the growth in value added that the company and its integrated business units may achieve by attending to all three horizons simultaneously.

The next phase of growth –barriers and challenges

Oleastro Enterprises Ltd has entered the pantheon of entrepreneurial small giants. The Ellinas family and their Oleastro Olive Park have made news on the local and international TV and radio channels around the world such as CyBC, CNN, Euronews, Discovery Channel, etc. Likewise, there have been numerous articles in the local and other European printed media.

In less than a decade, the business consolidated as the local market leader in organic olive oil and created the Oleastro Olive Park, which features interactive themes from the 60,000 year history of the olive. The Park, a tribute to this wonderful tree that has healed and nourished Cypriots for thousands of years, is both educational and recreational for all ages. Mastering the managerial challenges of growing pains and navigating the family business in its quest for new growth avenues is essential, as the family will itself grow. On the strategic map, new product and market development combined with a commitment to the sustainable development of the local community, has resulted in alliances with other artisans, vital for the sourcing and trading of traditional Anogyra produce, such as the carob products - historically referred to as the ‘black gold’ of Cyprus.

As member of the Cyprus Chamber of Commerce and Industry, the Cyprus Association for Cultural and Special Interest Tourism, the Cyprus Sustainable Tourism Initiative and the Slow Food Movement, they inspire others to support sustainable rural development, combining respect for authenticity, environment protection, social responsibility and promotion of tradition.

Appendix A

Organic Olive Oil Oleastro is the only one in Cyprus that ...

- is *organic* (produced without the use of any chemicals and certified by LACON as organically farmed). It is produced in Oleastro's own olive groves with love and care for this blessed tree. The Oleastro team controls fully the cultivation, the harvest, during which only the healthy olives are selected, and the extraction process, which takes place on the same day. This is the only way to ensure high olive oil quality.
- is *extracted in Oleastro's own olive mill* which is certified to ISO22000 (food safety), ISO 9001 (quality), and ISO14000 (environmental management) using *cold pressing and millstones* so that the olive oil preserves fully its nutritional and healing properties. This is the only way to ensure the preservation of the polyphenols without which the olive oil goes rancid and loses its organoleptic characteristics (flavor, aroma, color).
- is *stored directly in their own reservoirs* in a storage room certified to ISO22000, ISO 9001, and ISO14000 standards. Therefore, the olive oil *is spared unnecessary transport* which has a negative impact on quality. The reservoirs are made of *stainless steel*, the only way for the olive oil to maintain all its *properties and characteristics unchanged*.
- has a production process *under the control of the company and the Oleastro team at all stages* (cultivation, extraction process, storage, bottling). We are more than just olive oil traders.
- has been credited with *awards and distinctions*: Quality Award 2008, ISO22000 certificate (food safety), ISO 9001 certificate (quality), ISO14000 certificate (environmental management), LACON certificate (organic farming). It is the first Cyprus organic olive oil that can be found not only in the Cyprus market, but also in gourmet markets in the European Union, USA, and Japan.
- comes in a *wide variety of bottles and packaging* such as stylish handmade ceramic bottles (40ml to 1 litre) in olive design, wooden presentation boxes, sacks, baskets etc., as well as in combination with other organic products from Cyprus, such as carob honey, balsamic vinegar, and herbs. The family takes pride in being the first company to have upgraded Cyprus olive oil from a mere cooking ingredient to a elegant gift idea.
- is frequently selected as a *representative gift of authentic Cyprus* (e.g. by the Cyprus Tourism Organization, conference organisers, travel agents, and private companies).
- is the epitome of authenticity, marrying tradition and culture, in harmony with nature.

CHAPTER 4. SOCIAL IMPACT

- 4.1. Double Care (FEULL)
- 4.2. Neemland Ecosystems (FEULL)
- 4.3. Te Ayudo (FULP)
- 4.4. Regenerate (NTU)
- 4.5. Centaurs and Entrepreneurs in the Bulgarian Equine Industry:
The Case of Novex Horse Riding Club (RUSE)
- 4.6. 3iDS: R+D sustainable (FULP)

Case 4.1. Duos Cuidados (Double Care): Building business competitiveness through social action

By **Francisco J. García Rodríguez** (Profesor del Departamento de Economía y Dirección de Empresas de la Universidad de La Laguna, España. email: fgarcia@ull.es)

Abstract: In the case of Duos Cuidados (Double Care), we have an initiative from two young university entrepreneurs from the Canary Islands, who have found their inspiration in the elderly care sector. This sector has great potential in the whole of Western Europe due to the marked ageing of the population and the changing model of the traditional family. In the case of the Canary Islands, a peripheral region with an economic structure focused on tourism, elderly tourists may represent potential for business initiatives like this one. This case study is a good example of creativity applied to the needs analysis process as a source of inspiration for the creation of businesses. It offers important lessons on how to take advantage of business in an emerging sector.

Key words: *entrepreneurship, elderly people, dependent people, new social needs, business opportunities.*

Growing need for the care of elderly and dependent people: an expanding sector full of opportunities

In Spain, demographic and social changes have led to a steady increase in the population who are in a situation of dependence. In fact, the number of over 65s has doubled since 1970 (3.3 million in 1970 to over 6.6 million in 2000). There is also an added phenomenon of “ageing of the aged”, that is to say, the increase in the population of over 80s, which has doubled in only twenty years. Along with this reality, arising from ageing, there is also dependence through illness (chronic or degenerative) as well as an increase in workplace and traffic accidents creating young dependents that need to be included.

The ageing process that Spain is undergoing will lead to a dependency rate (which measures the population of over 65s in relation with those between 15 and 64) of 46.39% in 2040, slightly exceeding the EU average for the first time, according to data from the European Commission.

In the particular case of the Canary Islands, these data are even more relevant, as according to the Canarian Institute of Statistics, the number of people resident in the Canary Islands aged 75 or over will grow from 126,121 in 2010 to 181,111 in 2019. This is a reflection, among other things, of the lower death rate on the Canary Islands compared with the rest of the country.

Added to this situation is the fact that it will be impossible for families, in particular the women who are traditionally responsible for looking after these people, to continue taking responsibility for dependents. This means that the traditional system of care must be revised.

Along with these phenomena, a specific characteristic of the Canary Islands needs to be considered; the great attraction the Islands have for elderly foreigners. These people see the ideal retirement place in a politically stable tourist destination that has good communication links, a benign climate all year-round, and well-developed infrastructure and health services.

Furthermore, in 2007 the Spanish government implemented the so called ‘Law promoting personal autonomy and care for people and families in a situation of dependency’, commonly known as the ‘Dependency Law.’ This law provides financial assistance and benefits to people who require assistance at home, temporary or permanent residential care, assistance to promote their personal autonomy and even technical assistance of any kind.

This law will bring direct benefits for businesses that provide the abovementioned services. This is because, on the one hand, people requiring these services will have greater economic resources, and on the other, the Spanish autonomous regions are going to need the support of private enterprises to respond to requests for assistance.

Thus, according to Article 14 of the law “people who are declared as being dependent can receive directly a range of services provided through the Social Services network of the Autonomous Regions, through public centres and services or through authorized private ones.”

Therefore, the care of the elderly constitutes an enormous niche of opportunities, in Western Europe in general and specifically in the Canary Islands. More and more families are becoming dependent on these types of services to guarantee a comfortable and dignified life for their elderly loved ones.

The emergence of the idea

In this context, Duos Cuidados was set up in September 2009 in El Rosario, a small district on the island of Tenerife (Canary Islands) by Giamma Alonso (an agricultural engineer) and Adán Bello (a medical graduate), both 28 years old. As well as being linked by this business venture, they are also husband and wife. The idea arose from a personal experience Giamma had while looking after her neighbour. She saw the need for a professional and personalised care and companionship service “with a high human component”, as there was an important lack of both these aspects in this sector.

At that time, Giamma was attending several entrepreneurial courses as part of the business creation programme of the University of La Laguna (Emprende.ull) to develop an idea for a gardening service connected with the sector in which she had initially trained (agriculture). However, the experience of caring for her elderly neighbour along with the content of the course she was studying made her consider that she could combine the passion she had discovered for looking after someone with a way of earning a living. As Giamma herself says, “I obviously needed to work, and I knew that this business would improve the lives of many people.”

The services

The distinctive element of the services offered by Duos is the dual focus on both the dependent people and on their usual carers. The business covers include the following four activity areas:

a) Social-administrative area

- Providing the local Social Services with regular information on each of the beneficiaries of assistance and participating and collaborating with them in the coordination and supervision of these dependent people.
- Informing, advising and directing the beneficiaries on bureaucratic and administrative matters they have to deal with, such as, health care, benefits, housing costs, electricity, water, taxes, etc.

b) Health area:

- Personal hygiene, haircuts, shaving, pedicure and manicure.
- Dietary control, both in terms of quality and quantity of food and the preparation of special diets.
- Arranging and monitoring medical appointments, as well as checking that medicines are taken.
- Modification of negative daily habits and encouraging physical exercise.
- Regular blood pressure checks.
- Washing and treating bedridden patients.

c) Domestic area:

- Shopping for food and cleaning products and occasional preparation of certain food essential for improving diet.
- Collaborating in cleaning areas of the house most commonly used by the dependent person, such as the bathroom, the bedroom, the kitchen, etc.
- Encouraging and helping with washing, tidying up and mending the clothes of the dependent person.

d) Family and community integration area

- Contacting the family (sons, daughters, relatives) of the dependent person to encourage visits, as well as involving the family in certain commitments to the care and attention required by the dependent person.
- Encouraging the dependent person to attend different organized cultural, leisure and sporting activities, especially in the area closest to where the person lives (e.g. local festivals, cultural centres, clubs for the elderly) and transporting and accompanying them to these events.
- Accompanying the person when carrying out daily tasks (shopping, paying bills, etc).

One of the keys to the service offered by Duos consists of starting with the specific needs of the users and maintaining the greatest respect, both for them and their families. In fact, this is the competitive advantage they have over their main competitor, Mararia, and is integral to the personal and professional character of their service.

Duos, besides the services provided by carers, offers medical and psychological care to its users and their families. In addition, Duos believes that it is crucial to integrate the dependent people with their surroundings, encouraging them to acquire or recover habits and/or resources that will improve their level of autonomy and quality of life. The company believes that to achieve these objectives, it is much better if the elderly stay in their own homes, instead of, for example, being put into residential care centres.

The people

For Giamna Alonso, people are the most essential asset of Duos Cuidados, because the staff of his business “is currently made up of the best professionals in this sector, with a clear vocational and sympathetic spirit.” In fact, it could not be any other way, since the service offered has to be based on trust, as professionals in this sector go into the most intimate corners of the user’s home and help attend to their basic needs. So “the dedication and absolute commitment of the staff of the business are the key to its success.”

Thus, Duos Cuidados has always taken the qualifications of its staff very seriously, with the aim of guaranteeing personalised care adapted to the needs of each client. This is why continuous in-service training is a noteworthy feature of this business. Adán gives courses focusing on medical care tailored to the requests and needs of the employees. Over the last two years, a new care assistant has been employed to join the two partners who have been with the business from the start.

The quality of the care based on the ‘personal touch’ has meant that marketing by word of mouth has been the company’s main way of attracting new clients.

Obstacles should not prevent you from aspiring to future dreams

The history of Duos Cuidados has not been easy. Even though the initial investment of €6000 does not seem excessive, Giamna and Adán could not afford it with their own savings, which is why they had to resort to a family loan. Moreover, as well as the guidance and advice received from the programme [Emprende.ull](#), Giamna notes that the only public support received “*came from some prizes won for best business idea and best local young entrepreneur.*”

As well as this, one of the limitations on growth that Duos Cuidados has always had to face, and which could continue constraining it in the future, is the difficulty of finding specialised staff.

Finally, according to Giamna, “*the current economic crisis has affected the business greatly, as family incomes have been reduced and family members who are unemployed, theoretically, have more time to look after relatives, which has forced us to adjust our prices.*” However, “*...the truth is that although there is more time, the personal wear and tear that caring for a dependent person produces is greater than before and our services continue to be required.*”

Despite the current economic crisis, Giamna is markedly optimistic about the future of Duos: “We want to consolidate in the Island market, so that in the second stage, we can begin to tackle new markets.” In fact, they are already offering their services on other nearby islands, such as La Gomera and La Palma. This is just the beginning.

Case 4.1. TEACHING NOTES

Overview

This case study discusses the creative process and initial consolidation of a business focusing on the care sector for the elderly and other dependents in a peripheral region, whose economic structure is oriented mainly towards tourism. Emphasis is placed on the process of detecting an opportunity (insight), which in this case is not linked to the professional field of the lead entrepreneur. The key difficulties and competitive factors of an activity developed by two young university entrepreneurs are also highlighted. They now have the challenge of consolidating the business in the near future both through greater market penetration and diversification into other sectors with clients that have greater purchasing power, such as elderly tourists.

Learning Purposes

The most relevant elements for discussion in this case study focus on the following aspects:

- Where to look for business opportunities; the importance of creativity being understood as integral to business; leisure, hobbies and our personal experiences as generators of ‘insight.’
- The opportunities for business innovation linked to new activity sectors, which are the result of social change.
- What strategies can enable a business to face the consequences of the current economic crisis?
- How to take advantage of a chance to access a segment of the market made up of elderly foreign residents (necessary resources, strategies, etc.).
- Options and geographical expansion strategies of the business and the resources necessary for these.

Intended courses and target audience(s)

- Potential students of entrepreneurial courses who are in the very early stages of their training
- University students studying the creation, administration and management of businesses.

Suggested training techniques (Teaching methods)

It is suggested that having read the case study individually, students work in groups to develop a SWOT analysis of the business initiative, indicating the corresponding offensive, defensive or reorientation strategies for survival.

Following this, the groups can present their analyses. Finally a class debate could be held on the discovery/emergence of a business opportunity in a non-professional context, emphasising the idea of focusing attention/observation on daily life as a source of inspiration.

Additional readings and references

BARLOW, N. 2006. *Rethink: How To Think Differently*, Capstone: London

Manuals on the creation and management of businesses or marketing, in which the methodology of SWOT analysis is developed.

Case 4.2. Building a global business, planting a local ‘seed’: The case of Neemland Ecosystem SARL

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Abstract: This case study shows how the use of an existing raw material, widely available in rural areas of Senegal, known as the neem tree, was exploited by young entrepreneur Ibrahima Sarr and his partner Diego Díaz to develop a business initiative with a global potential. This initiative has arisen from the commercialization of various products derived from the neem tree, particularly the oil which is used as an organic pesticide. As well as this, it is worth noting the important integration between the business activity and the social and environmental aspects of the initiative. The enterprise is currently at the stage of possible growth and expansion from the local Senegalese market to the European market, using the Canary Islands as a launch pad. All of this will involve significant changes for the entrepreneurs and their project which this expansion will involve will be discussed in this case study.

Key words: *competitive advantage, expansion, organic agriculture, finance, costs, deadlock, neem tree, social entrepreneurship.*

The person, his values and the germ of the idea.

Ibrahima Sarr was born in 1980 in Tambacounda (Senegal), and now lives with his wife and daughter in the Senegalese locality of Thies. After finishing his baccalaureate studies in 2005, he did a degree in foreign languages (French, English, Spanish) applied to international trade, at the University Gaston Berger in Saint Louis (northern Senegal). This choice of studies clearly shows the enterprising character and international vocation of this young man. This was further confirmed when he obtained a scholarship from the Government of the Canary Islands (Spain) to study for a Master’s in Foreign Trade Management at the University of La Laguna (Tenerife, Spain) during the 2008/2009 academic year. *“After my master’s, I didn’t choose the easiest option to stay in the Canary Islands to work, which most of my classmates did because I want the knowledge I gained to benefit my country and people,”* says Ibrahima. In this context, the idea for a business arose, one that would constitute a way of earning a living and also fulfil the social aim of contributing to the improvement of living conditions in his country and promoting the integration of a business activity with the environment³⁷.

The meeting between Ibrahima and Diego M. Díaz González, a technical trainer in Agronomy and Agro-ecology and resident of Tenerife, was essential for the generation of the idea. Diego, a social entrepreneur, was one of the founders of Canarina, an association which has carried out different projects in the field of development cooperation. Diego and Ibrahima immediately connected, and discovered they had a lot in common, reaching the conclusion that their objectives could complement each other. Thus, they set up a business activity based on the exploitation of the seed from the neem tree, a plant species that is widespread in Senegal. Until then, Ibrahima himself had believed the popular saying in his country that the neem tree *“... was only for providing shade.”*

Crisis in intensive farming and pesticide use

³⁷ See interview with Ibrahima Sarr: http://www.salt2010.es/docs.php?f=dss_090510_SALT2010.pdf

Intensive farming is having serious worldwide effects on the environment and society, which call into question the positive effects of the increase in productivity. These effects include³⁸:

- water pollution caused by nitrates, phosphates and pesticides.
- production of anthropogenic gases responsible for the greenhouse effect, methane and nitrous oxide, and significant contribution to other types of air and water pollution
- farming, forestry and fishing methods causing the loss of biodiversity in the world; the worldwide external costs of these three sectors can be considerable.

Insecticides, herbicides and fungicides play a central role in the environmental crisis caused by intensive farming. They are intensively used in many countries, both developed and developing ones, which leads to the pollution of freshwater with carcinogenic compounds and other poisons that affect humans and other forms of wildlife.

Pesticides also reduce biodiversity, since they destroy various grasses and insects some of which are food for birds and other animals.

The use of pesticides has increased sharply over the last 35 years, reaching growth rates of between 4 and 5.4 % in some regions. In the 1990s, a reduction in the use of insecticides was noted in both developed countries, like France, Germany and the United Kingdom and in some developing countries, like India. In contrast, the use of herbicides continues to increase in most places around the world.

Furthermore, intensive farming methods are undermining the future of agriculture through soil degradation, salinization, excessive water extraction and the reduction of crop and livestock genetic diversity. However, the long-term consequences of these processes are hard to quantify.

As concerns grow about pollution and the loss of biodiversity, the future use of pesticides may increase more slowly than in the past. Moreover, in developed countries, their use is becoming more and more restricted by laws and taxes. In addition, their use will be curbed by the increasing demand for organic crops, produced without using chemical products, which is leading to a growth in the number of organic consumers. All of this means that organic methods of pest control could have great potential in the future evolution of the farming sector.

The neem tree: reunited with ancient wisdom

The neem tree (*Azadirachta Indica*) is an ancient plant species, with dark green leaves, and a yellow, oval-shaped fruit with a seed in the middle. The tree can reach a height of 30 metres and a diameter of 70 centimetres. In India, from where it originates, the medicinal properties of neem are well known and have been used for many years in traditional medicine. In fact, even today, Hindus who live in rural areas refer to the neem tree as “the village pharmacy” because of its ability to relieve many illnesses.

Several scientifically proven medical uses of this tree have been found. The seed, bark and leaves have compounds that have antiseptic, antiviral, anti-inflammatory, anti-ulcer and anti-fungal properties, as well as being an excellent aid in the treatment and prevention of various illnesses, such as, psoriasis, diabetes, cancer, herpes, dental disorders, dermatology, allergies, hepatitis, fungi and malaria, among others..

Recently, the potential of neem as an agricultural insecticide has been demonstrated. This is due to the fact that the components of neem are similar to hormones, and are absorbed by an insect’s body as if they were authentic hormones. These false hormones block the insect’s endocrine system causing brain and body confusion, which

³⁸ FAO (2010): World agriculture: towards 2015/2030.
See: <http://www.fao.org/docrep/004/y3557e/y3557e00.htm>

disturbs the insect's fertility and egg-laying and thus prevents reproduction. Repeated use of neem results in a progressive reduction in the insect population.

Therefore, the oil from the seeds is highly valued. The different parts of the plant (leaves, seeds, bark, etc.) are rich in various substances, (azadirachtin, nimbin, etc) which give it potential for a wide range of uses, among which are its effective action as insecticide, fungicide, bactericide and antiviral. Simple products from the neem tree can generate other new ones which, combined with other substances, can have a wide range of applications in the pharmaceutical and especially the agricultural market.

The business activity and the products

On the 13th August 2009, Ibrahima and Diego officially launched the business project, Neemland Ecosystem SARL³⁹, with the objective of producing and commercializing various products derived from neem to be used as insecticides, fungicides, nematocides and natural organic fertilizers which could protect crops from various blights and diseases. The head office of the company is Touba Toul Rural Community (Senegal).

The neem tree is very widespread in Senegal, where 20 to 30 million are estimated to exist. The tree grows wild and the local population does not use it for anything in particular.

The business has developed through the existence of a wide network of 300 women and youngsters resident in the rural and suburban areas of the 96 villages which make up the Rural Community and where the majority of neem trees are located. These women and youngsters have become seed pickers, who then sell the seeds to Neemland Ecosystem SARL. Thus, neem seed picking is an income generating activity for the community, which adds to the few sources of income usually available and which can contribute to the creation of a fair-trade model and social equality in the area.

After processing the leaves and seeds from the neem, the three main products offered by Neemland Ecosystem SARL are obtained:

- a) **Neemland oil.** This is a natural insecticide used in preventative treatment and to cure crops affected by insects and blights. It acts as an organic, antiviral insecticide and fungicide.
- b) **Neemland powder.** This is an insecticide, fungicide and nematocide in powder form used to protect grain and crops against insects.
- c) **Neemland rakkal (shell extract).** This is a granulated insecticide, fungicide and nematocide used for soil treatment against nematodes, termites and other ground insects.

Description of the production process

The production process carried out by Neemland Ecosystem begins with the start of the harvest, which takes place between June and November. This is followed by the extraction of the seed from inside the fruit. Both tasks are done manually by groups of women who are paid depending on the quantity of seeds collected.⁴⁰ (Figure 1)

As well as creating employment in the area, the manual extraction of neem seeds ensures better seed selection before processing, which benefits the quality, cleanliness and purity of the oil obtained.

At Neemland Ecosystem, neem seeds are received weekly until January/February, with an average weekly harvest of between 100 and 300 kg.

³⁹ SARL: French acronym, Société à responsabilité limitée

⁴⁰ For every kilogram of neem seeds picked, 100 francs Cfa, Senegalese currency, are paid (approximately €0.15)

Once the seeds arrive at the company's warehouse a mesh table⁴¹ is used to dry them, a process that takes a maximum of three or four days. Whilst the seeds are being dried, an initial selection is made to get rid of deteriorated seeds and residues⁴² (Figure 2). Following this, the dried seeds undergo an initial cleaning and second drying stage using the same mesh table, which was priced at 25,000 francs Cfa (€38).

This task is carried out by two workers, who earn 1000 francs Cfa (€1.5) per daily. Subsequently, the 15 factory workers separate the shell from the kernel using a mortar. Normally the kernel represents 40% of the weight and the shell the remaining 60%⁴³ (Figure 3). These women earn 200 francs Cfa (€0.3) for every 10 kg of neem processed⁴⁴ to obtain the kernel.

Once processed, the seeds are ground, using an electric grinder⁴⁵ (Figure 4). Then, the resulting powder is pressed (Figure 5) to produce Neemland oil. Both the grinder and press have a processing capacity of between 2.5 and 5 tons of kernels a day.

The residue obtained after extracting the oil is known as Neemland rakkal (shell extract). This is mixed with part of the shells obtained from the shelling process and enriched with a little Neemland oil to ensure a minimum presence of the oil.

The quantities of kernels ground and pressed depend on market demand and the restrictions on space in the factory, but the aim is to always have a stock of 500 litres of oil and 5 tons of shell extract. For every 100 kg of seeds processed 40 kg of pressed kernels (and 60 kgs. of shells) are obtained, which, in turn, produces 13 litres of natural neem oil and some 27 kg of neem rakkal.

Finally, the leaves from the neem trees located around the factory are picked and ground to produce Neemland powder. Obtaining this product does not add any extra production costs and its yield is almost 100%.

Neemland oil is distributed in 1- and 5-litre bottles and 20- and 200-litre drums, while the shell extract is packaged in 5kg, 25kg and 50kg sacks. The neem leaf powder is also packaged in 5kg, 25kg and 50kg sacks.

The packaging process is carried out manually at the company, and the bottles and sacks are purchased from a company located in Dakar at the following prices:

- 1-litre bottle, colour white : 139.24 Francs Cfa TTC⁴⁶ (€0.21)
- 5-litre bottle colour white: 460.2 francs Cfa TTC (€0.70)
- 20-litre can colour white: 3127 francs Cfa TTC (€4.77)
- Polypropylene printed sacks : 118 francs Cfa TTC (€0.17)

Neemland Ecosystem is responsible for paying for the transportation of the packaging from the supplier in Dakar to their factory in Touba Toul. The transportation costs around 10,000 francs Cfa (€15) and is by bus depending on the volume of packaging.

The bottles are purchased without any labelling, so the subsequent printing costs of labels are as follows:

- 1000 labels for 1-litre bottles: 25,000 francs Cfa (€38)

⁴¹ The company aims to buy a dozen of these tables to hand over to the pickers so they can pick, dry and pre-select seeds. The decentralization of this initial stage of the process, as well as allowing the company to free up resources to increase production, will also be a way of strengthening the involvement of local people living in villages near the factory in the business. In this case, the cost of the first stage of the process will be 150 francs Cfa (€0.225) per kilogram supplied to the factory.

⁴² In the cleaning process, few seeds are discarded due to the general good quality of those that reach the warehouse.

⁴³ These quantities depend on the ripeness of the fruit, owing to the fact that some ripe fruits contain up to 3 kernels inside.

⁴⁴ They can process 200 kg per day.

⁴⁵ The electric grinder they are currently using in the company was purchased for €1,500 and it has an estimated service life of 5 years.

⁴⁶ Toutes Taxes Compresses (All taxes included)

- 1000 labels for 5-litre bottles: 30.000 francs Cfa (€45)
- 1000 labels for 20-litre cans: 30.000 francs Cfa (€45)
- 1000 publicity leaflets for each product: 500,000 francs Cfa (€762)

Neemland Ecosystem has signed distribution agreements with some sellers of phytosanitary products, shops ‘Todo Para la Agricultura’, farmers associations, the National Federation of Organic Farmers, and has also sold the products directly from their own sales office.

The prices of the products for the local market are as follows:

Neemland powder	750 francs Cfa/kg (€1.14/kg)
Neemland oil	5.000 francs Cfa/litre (€7.6/l)
Neemland rakkal (shell extract)	750 francs Cfa/kg (€1.14/kg)

The company’s current publicity costs are very small and are limited to the information leaflets aimed at clients. The factory premises in Touba Toul are not owned by the company but rented at a monthly cost of 50,000 francs Cfa (€76) per month. The cost of the water supply is 5,000 francs Cfa (€7.6) per month and the electricity is supplied by a generator that uses 5 litres of diesel a day, which gives rise to a monthly cost of 100,000 francs Cfa (€152). However, having purchased a new press (ZX10)⁴⁷ the company has just signed an agreement with SENELEC (Sengal National Electric) to supply electricity, which according to production predictions will entail a monthly cost of 500,000 francs Cfa (€762).

Competitive advantages, recognition and awards for entrepreneurial work

Neemland Ecosystem has the advantage of offering very competitive prices together with high-quality finished products. The main competitor in the Senegalese agricultural sector, which is the current target market, is a state-owned producer of phytosanitary chemicals, whose product has a lower quality but a higher price, due to its chemical extraction process. Moreover, Neemland Ecosystem has great potential for differentiation due to the fact that it offers products that are 100% natural, environmentally-friendly and safe for human health. This is a brand image that is transmitted and consolidated through tests and controls carried out by recognised public and private services.

The business activity of this young entrepreneur has received recognition from various places, the most recent being the [II Premio Joven Empresario con Compromiso Social Bancaja–Universidad de La Laguna](#), awarded by the Bancaja Chair for Young Entrepreneurs of the University of La Laguna⁴⁸. The University itself, thanks to the sponsorship of a Canary Island financial institution, awarded Neemland Ecosystem⁴⁹ the [first prize in their entrepreneurial promotion programme. Cajacanarias-Emprende.ull](#) on the 15th April 2010

Previously, the Tenerife Innova programme, from the Cabildo Insular de Tenerife (Tenerife Island Authority), awarded the company the [premió la iniciativa](#) (Initiative award). As well as a subsidy of €1000, the prize includes a maximum of €20,000 to purchase material to put into the business, with half of the investment going towards equipment for R&D.⁵⁰

⁴⁷ As well as the manual press the company already had, purchased for €228 and with a service life of approximately 3 years, a motorized press has also been purchased for €3.049. It is calculated that, with the renewal of some of the fragile parts every 2 or 3 years, it will have a service life of 10 years.

⁴⁸ See: <http://bancajauill.blogspot.com/2010/12/acto-de-entrega-de-los-premios-de-la.html>

⁴⁹ See: <http://emprendeull.ning.com/profiles/blogs/excelente-nivel-de-los>

⁵⁰ See: <http://www.tfinnova.es/vernoticia.aspx?idnoticia=1087&submenu=1&opcionmenu=6>

The future: between hope and uncertainty

At the moment, Neeland Ecosystem is selling its products to Senegalese farmers with reasonable success. The recent arrival of the new ZX10 press will mean a substantial increase in production capacity from current levels. The company wants to take advantage of the proximity of the Canary Islands and Senegal and the strategic location of the islands as a tri-continental logistic platform to set up a base to penetrate the market of Canarian organic farmers and, subsequently, those of the rest of Europe. A first step towards this has been their recent establishment in the [Scientific and Technological Park of Tenerife](#)⁵¹.

Furthermore, the agreements signed with the Department of Phytopathology in the Biology Faculty of the University of La Laguna, The Department of Vegetable Toxicology of the Pharmacy Faculty of the University of Dakar, the Canarian Institute of Agricultural Research and the Senegalese Institute of Agricultural Research (ISRA) open up very promising avenues in the area of R&D for the launch of innovative products with high added value and a global focus in the near future. The aim is to exploit other uses of neem oil in the cosmetics industry, such as the production of organic soaps, shampoos, etc.

In fact, experiments are already being carried out on neem potassium soap, a novel product on the international market which offers the benefits of potassium soap and the properties of neem for washing vegetable material, controlling insects, and for use as a disinfectant, etc.

However, for this expansion process to happen important capital investment is necessary and Neeland Ecosystem's owners must be able to link this to the process.

Assignment questions (Questions for discussion)

- What are the key factors that have led to this initiative developing in the way that it has?
- Why does the environmental sector offer opportunities to create new business activities? Does exploiting these opportunities contribute to sustainability, or on the contrary, do they have a negative effect on the environmental crisis?
- Considering the outline and structure of the current business costs, what planning would be required to continue globalizing this activity?

⁵¹ See: <http://www.pttenerife.es/>

Appendix 1.



Figure 1 Picking neem seeds



Figure 2 Drying and pre-selection of neem seeds



Figure 3 Processing neem seeds



Figure 4 Grinding neem seeds



Figure 5 Pressing neem seeds using a manual press

Case.4.2. TEACHING NOTES

1. Overview

In this case study, the entrepreneurial activity of Ibrahima Sarr, a young Senegalese postgraduate in foreign trade management at the University of La Laguna is discussed. He has exploited the seeds of the neem tree, which grows wild in rural areas of his country. The seeds are processed to produce a vegetable oil that can be used as an organic pesticide. He has set up an office in the Scientific and Technology Park in Tenerife to export the product to Europe. In the study, the production processes of the three main products offered by Neeland Ecosystem SARL are described. Although currently, these products are focused on a limited market, Senegal, one, the aim is for students to understand and describe the productive process and outline the consequences and changes required to develop the business on a global scale.

2. Teaching/Training Objectives

Analysing this case study attempts to:

1. Evaluate personal qualities, such as perseverance, effort, ability to generate networks, specialised training, etc. to make up for the lack of material resources when setting up a business initiative.
2. Detect opportunities for business innovation linked to new dynamics of change in global markets, in this case in the environmental and organic farming sectors.
3. Show the positive effects that entrepreneurship and business activity can have on certain environmental and social problems.
4. Design a cost and management model that will help the business when making decisions.
5. Carry out economic and financial planning for the business with a view to international expansion, assessing commercial and financing options on a global scale.

3. Intended courses and target audience(s)

- Students who have been involved in setting up a business initiative, especially in the sector of agricultural and livestock products with an organic focus.
- Students with interests relating to business management.

4. Suggested Training techniques (Teaching methods)

It is suggested that once having read the case individually, students get together in working groups of 4 to 6 people with the aim of proposing a cost model adapted to the current structure of the business.

Subsequently, the same groups should propose a plan of internationalization and globalization of the business, pointing out economic, financial and commercial proposals and explaining the difficulties, as well as their possible solutions.

Finally, these will be presented and the previous questions will be discussed with the whole group. Other questions related to the key competitive, social and environmental factors of the activity will also be considered.

5. Questions (Topics) for discussion

What are the key factors that have led to this initiative developing in the way that it has? This should help the students to reflect on the importance of the personal qualities of the entrepreneurs when developing a business initiative.

Why does the environmental sector offer opportunities to create new business activities? Does exploiting these opportunities contribute to sustainability, or on the contrary, does it have a negative effect on the environmental crisis? This attempts to demonstrate the business opportunities that exist in the environmental

context and on the other hand, the synergies between environmental protection and business activity.

Considering the outline and structure of the current business costs, what planning would be required to continue globalizing this activity? The aim is for students to transfer their focus from local to global, attempting to depict the 'roadmap' and the main difficulties ahead.

Case 4.3. Te Ayudo reflects

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Prof. Rosa M. Batista Canino (Universidad de Las Palmas de Gran Canaria)

Abstract. Te Ayudo⁵² is a good case of a company that was created in order to offer a social service. The entrepreneur who created the company was clear from the very beginning of the need to start up his own business. In this case study, the reader will find that things do not always work out as planned. The company was subject to continuous stress imposed by the environment and the entrepreneur needed to face ongoing challenges with a cool head, a capacity to analyse situations, and the determination to act if changes were deemed necessary. Today, with more than five years business experience behind him, José Miguel Rodríguez, the founder, faces a re-structuring of his company in order to survive the hard economic situation that is putting its continued existence at risk.

Key words: *Social services, senior citizens, public sector, financial restrictions, economic crisis.*

“If my company ceases to be appointed as the Town Hall’s official home help service , I will take a break and go abroad. I have always wanted to perfect my English and I would take the chance to see how they do things in other countries and try to gain new ideas,” said José Miguel Rodríguez Barrera, head of the Te Ayudo company. He reached this conclusion after battling through 5 years of ups and downs. Now, as we see, the severe economic crisis has shaken up both the Canarian and the entire global economy, and inevitably it is affecting his company too.

But to get a real understanding of how José Miguel ended up in this situation, we need to look at the history of this keen entrepreneur and of the company that he created with so much love and devotion.

Once his studies in administration and business management at the University of Las Palmas in Gran Canaria were finished and after having gained a certain amount of work experience as a sales manager in financial institutions and as a technician in the Council of Economy and Finance in the Canarian Government, the idea of starting his own business started rolling around in José Miguel’s head. He first considered the possibilities in the tourism sector, and contacted Canarian business people with a view to opening new venues for his business in franchise form. Although some of the contacts he made proved promising, the idea did not take off.

It was immediately after a careful study of the Canarian demographic and socioeconomic statistics, that José Miguel considered the possibility of entering the world of caring for the elderly. He discovered a shocking reality that would affect the entire country from one end to the other: *“By the year 2050, one in every three people in Spain will be 65 years old”*. This fact shocked him and it was then that José Miguel became interested in this sector and started his entrepreneurial activities.

⁵² “Te ayudo” means “I help you”..

Although when he devised his company the Dependency Law⁵³ had not been enacted (indeed, there was not even a mention of it coming into force) everything indicated that this was the sector of the future. It was at the end of 2004 that José Miguel, whose interest in starting his own business was growing daily, decided to enroll in the Entrepreneurship Programme at the University of Las Palmas. Here he established a friendship with José Cárdenes, a counselor and advisor in business start-up, and found that he too was restless and eager to set up his own business.

In order to better understand the sector that had aroused his interest, he enrolled in the Geriatric Medicine and Gerontology Diploma course at the University of Las Palmas in Gran Canaria. The result of these studies, apart from being a way into the sector, was the ability to make key contacts and also meet experts in the field. He remains in contact with these.

In September of 2005, José Miguel took the final step and along with three other people, he founded Te Ayudo as a New Limited Liability Company⁵⁴ with a capital of €4,000. From the beginning he was the only one who as well as contributing financially, also contributed labour hours to the company. He became the “very soul of the project”. Today, the situation has changed and José Miguel owns 75% of the business alongside his mother who remains a silent partner in the company.

Te Ayudo was created to supply a service that would fill a gap in the the elderly care sector. It offered a comprehensive service that combined traditional home help with activities held outside the home, workshops, and a telecare service. The full range of care packages offered by Te Ayudo can be divided into four main categories: domestic chores, personalized services, senior citizen activities and also tele-assistance. In the domestic chores category various services are offered such as home cleaning, meal preparation, grocery shopping and washing and ironing of clothes, amongst others. Included in personalised service is accompaniment in the home and in hospital, support for toilet use, postural changes and medication management. Other specific activities for the elderly include specially adapted sports, cultural visits, social development, courses for adapting to new technologies and tournaments. Finally, the tele-assistance service consists of year-round 24 hour telephone assistance. Care is provided in cooperation with Mapfre Assistance Gold. They also offer professional advice to family members on how to fill in aid dependency forms and specific paperwork as well as on the purchasing of technical assistance and orthopedic products.

Although basically a local service, the scope of this company is provincial and includes every town on the island of Gran Canaria. However, when Te Ayudo started operating it was only competing against two other companies, one of which had cornered the market. However, by 2007, only two years before the Law of Dependency came into force, the number of competing firms had grown rapidly. Some of these companies have subsequently closed as a result of the negative effect of the economic crisis on the sector.

⁵³ Law 39/2006 of 14 December, on Personal Autonomy and Care for Dependent People.

⁵⁴ The New Limited Liability Company (SLNE) is a special type of limited company recently established in Spain, suitable for small business projects, which facilitates their establishment and implementation with full legal guarantees. See Law/Article 7/2003 of 1 April. This type of company has access to specific grants which are available to people on the Canary Islands.

One important principle of Te Ayudo was that it should provide the user with highly qualified and people-orientated carers. As José Miguel pointed out in an interview published in a regional newspaper in October 2008, *“the most delicate business area is that of human resources, as our personnel are the face of the company. It is they who have contact with the clients.”* Another positive aspect of Te Ayudo is that it offers an individual and personalised service adapted to the customer’s needs. “If users require another service, we make every effort possible to provide it,” explained José Miguel.

Te Ayudo has gone through a thorough process of approval by all the relevant government agencies, with the authorization of the General Department of Social Welfare of the Government of Gran Canaria for the provision of home help services and benefits given under the Law of Dependency. This has allowed them to be considered in the allocation of home-help services and also day facilities for patients with Alzheimer’s in several towns on the Island.

Soon the company was contracted by a number of local public administration offices and these contracts accounted for almost 90% of the consolidated turnover. The remainder of the turnover came from other individuals or companies. As noted by José Miguel, *“it is a relatively high cost service and independent customers are not always willing to pay the price.”* The insolvency of the demand is high and the fact that they won the contract from the Social Services was an important victory for a company that was highly focused on gaining this type of client. However, what at first was a great opportunity soon became an impediment, because of the severe economic crisis in Spain and particularly the way this crisis affected local authorities.

The company grew to eighteen employees, some of whom were only recruited for specific contracts, and others employed on a full time basis to do various kind of development work. Their monthly salary (on the payroll) was supposed to be €18,000. During the economic crisis, difficulties arose when payment was due from the public administration offices and that is when the problems really began for José Miguel. Now his company was the one that needed help to stay in business. He really would have to work wonders to get the money to pay these salaries and this in turn became his obsession and his worst nightmare.

He managed to obtain three credit loans. Now he is currently working with four banks and admits that it is due to his contacts in the sector, some of which he made when he was working in a financial institution, that he has managed to overcome some of his cash problems.

The implementation of the Law of Dependency in Spain and specifically in the Canary Islands has not produced the expected results. This is demonstrated in the figures which place the Canaries at the bottom of the league table with respect to care-giving with only 0.38 people out of every 100 receiving care, which is substantially below the national average of 1.34, according to INE database. Likewise in its report, the National Observatory of the Dependent, states that some of the autonomous communities, including the Canary Islands, do not provide the benefits and services that the law provides, placing their citizens at a disadvantage in a matter as basic as social protection.

In the fourth year of implementation of the Law, the Observatory highlighted some negative aspects in its application that gave rise to what has been called the *‘limbo of dependency’*. This refers to, among other things,

the model of government funding as well as the lack of professionalism in the sector, especially with regard to the caregiver. The Observatory indicated that, according to the official figures calculated at the beginning of December 2010, there were 234,463 people in this state of 'limbo'. That means that although it has been recognized that these people are entitled to receive this benefit, their cases have not been approved. This situation worsened slightly in the last half of 2010, with the Canaries being ranked last in relation to the number of approved benefits. In addition, whilst the Canaries have only €32 earmarked for each resident, the funding given by the General State Administration reports €102 per resident. In a crisis situations such as the present one, social services departments suffer major cutbacks.

Currently, Te Ayudo has 7 employees, which far from being a problem, has turned out to be a relief for the owner-manager. Looking back, José Miguel believes that one of his mistakes was to focus on the growth of his business without worrying about the profits. He considers himself more of "an enterprising person than a businessman", and therefore if he was to begin again, he would do it with a person whom he could rely on as a true "*right hand*", someone to share the heavy burden of running the company.

Presently José Miguel is on a break— his first few days off in five years. Mentally exhausted by the enormous pressure that he has suffered over the last two years when he devoted himself, heart and soul to a business that "*demande 24 hours a day, 365 days a year*", he now finds himself in a period of reflection. At the beginning of his business venture, his goal was to be a reference point for social services in Gran Canaria. This goal is yet to be achieved and he now realizes that it will be extremely difficult to do so. However, far from being put off by the adversity of the situation, he is now mulling over new possibilities for projects.

He will soon try again to win the contract for the home-help service provided by one of the town halls with which he already has a working relationship. If, in the end, his company does not achieve this, he is thinking of taking time off, away from the island. He will try again to learn English and observe and learn from how business is done in other parts of the world. He is also clear that he wants to turn his business around without leaving the care for the elderly sector. He is thinking in terms of training and other key elements of welfare support which will allow him to reduce his dependency on the public sector. He does not lack ideas or desire and wants to find his calling at any price. As he himself states: "*I am not afraid to make mistakes if I can learn from them*".

Times are hard for Te Ayudo and its founder. Its dependency on the public sector combined with the economic crisis has not allowed the company to position itself correctly. If Te Ayudo is finally able to win the home-help contract from the Town Hall will the founder's problems be solved? And even if the contract is won, will profound changes in the Te Ayudo business model still be required?

CASE.4.3. TEACHING NOTES

Overview

This case study illustrates the creation and development of a service company in the elderly-care sector. We look at the delicate situation after five years spent in business. Its high dependency on the public sector, aggravated by the crisis that is shaking the global economy to the core and the enforcement of the Dependency Law has taken its toll on this company. Despite the high pressure that the founder has been under with regard to liquidity problems, this case study shows the success of the entrepreneurial spirit. The founder of the business, far from losing heart in the face of adversity, is already thinking of new projects and new ideas to re-direct his business.

Key concepts in the entrepreneurial process such as the detection of business opportunities, the importance of networking, the role of entrepreneurial training, and the need for strategic restructuring of a business are reviewed. Likewise the features that characterize the entrepreneurial spirit are revealed. Also the need for the entrepreneur to have a person or team of persons to rely on in difficult times is discussed.

Special emphasis is put on the need to learn from mistakes and to understand that failure may be a source that helps business improvement and individual and organisational learning.

Intended courses and target audience

The case study is aimed at students interested in the process that characterises and guides the creation of a company. It can also be used to address strategic planning issues.

Highlights of the story; what are the main issues that need to be addressed?

Special emphasis should be put on the problems faced by a company that is highly dependent on one type of client (in this case, local authorities). It is also important to emphasize the importance of relying on a wide network of contacts at different stages of the entrepreneurial process and how to overcome difficulties along the way. Another aspect to highlight is whether relying on another person or a team is useful in decision making because it is often difficult to make decisions alone when one is under considerable pressure.

Suggested teaching techniques: how the lecture could approach the audience, defining the team or personal roles, requirements, time framework.

It would be helpful for the students to be given the case study before the class discussion so they can read it carefully. Likewise it would be helpful if they could read about the founder, the company itself, the sector in which the company operates, the competition, and specific obstacle faced by the company, such as the Dependency Law in Spain. This reading could be done either independently or as a group exercise.

1. Present and discuss the characteristics of the sector in which the company operates, making use of the information given in the text along with the students existing knowledge.

2. Review each of the key aspects in the entrepreneurial process that are presented in this case study; these include the detection of a business opportunity, the importance of establishing a contact network, the role of entrepreneurial training and the features that characterize the entrepreneurial spirit.
3. Propose and justify alternatives to address the difficulties which the company currently faces.

Teaching/Training Objectives:

The student should be able to:

- Identify the entrepreneurial process stages.
- Research and analyse the elderly care sector.
- Carry out a SWOT analysis for the business idea.
- Identify the problems the company faces and give possible solutions.

Suggested questions for discussion, to initiate debate or for use as themes for follow up work.

- Identify what situations have brought Te Ayudo to its current situation.
- Could its current situation have been avoided? How?
- After having analyzed the sector of care for the elderly, do you think that it really is the sector of the future? Analyze the potential that the current socio-economic structure of the population in your own geographical area offers a company of this kind in the future.

Assessment criteria:

To be set by the teacher according to the degree of work put in by the student in tackling this case study.

Additional exhibits/info related to the case:

Table 1 Growth of the senior citizens population, 1900 -2000

Años*	Total	65 años y más	
	España	Absolutototal	% respecto al total
1900	18,618,086	967,774	5.2%
1910	19,995,686	1,105,569	5.5%
1920	21,389,842	1,216,693	5.7%
1930	23,677,794	1,440,744	6.1%
1940	26,015,907	1,699,860	6.5%
1950	27,976,755	2,022,523	7.2%
1960	30,528,539	2,505,165	8.2%
1970	34,040,989	3,290,800	9.7%
1981	37,683,362	4,236,740	11.2%
1991	38,872,268	5,370,252	13.8%
2001	40,847,371	6,958,516	17.0%
2007	45,200,737	7,531,826	16.7%
2010	45,311,954	7,785,480	17.2%
2020	48,664,658	9,345,955	19.2%

2030	50,878,142	11,684,570	23.0%
2040	52,540,936	14,569,813	27.7%
2050	53,159,991	16,387,874	30.8%
2060	52,511,518	15,679,878	29.9%

* From 1990 to 2007 the data is real; from 2010 of the figures are projections

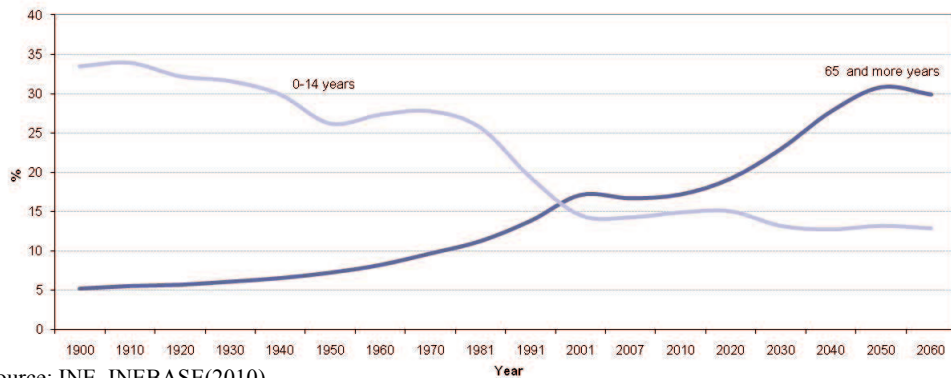
Source: INE (*National Statistics Institute*) INEBASE (2010)

1990-2001 Population figures. Provincial population reports according to age and sex from 1900 until 2001.

Review of the Municipal Population Register on 1 January 2007.

Population projections calculated from 2001 Population Census.

Figure 1 Demographic forecast for Spain, 1900-2060



Source: INE. INEBASE(2010)

Additional readings and references if helpful

Ley 39/2006, de 14 de diciembre, de Promoción de la Autonomía Personal y Atención a las personas en situación de dependencia. Available at:

<http://www.boe.es/boe/dias/2006/12/15/pdfs/A44142-44156.pdf>

Case 4.4. Regenerate: A fashion entrepreneur has a flair for fighting poverty

By *Kostas Galanakis and Paraskevi Gkiourka*, Nottingham Business School, Nottingham Trent University, United Kingdom

Abstract. Social Entrepreneurship is emerging across Europe and new organisations are addressing contemporary challenges through unconventional initiatives that aim to bring social change in a sustainable way. This entrepreneurial spirit that uses innovative ways to pursue social objectives by creating products, services or structures that cater for social needs is a vital element towards sustainable development and the restructuring of regional economies. This case study illustrates aspects of social entrepreneurship in the fashion industry.

Keywords: *social entrepreneurship, fashion*

Introduction

Hive entrepreneur May Cortazzi is setting new trends in the drive to fight poverty through fashion. Her fashion label, 'Regenerate', is designed for the customer who wants to look good while doing good. *"Regenerate is all about new ways of tackling poverty, helping the environment and using eco-intelligent fabrics,"* says May. *"It caters for the demand on the high street for style-conscious ethical clothing,"*

With profits being ploughed into good causes such as helping street-children in Indonesia, the Regenerate message seems to have struck a chord. It attracts orders from across the world, boasts a large online fan-base and enjoys a celebrity following from the music scene.

May's original motivation for the business dates back to time she spent with the Barli Institute in India, teaching dressmaking and embroidery to help women from lower castes improve their life chances. It was, however, her association with The Hive that helped translate her vision into reality.

She was pursuing MA studies at Nottingham Trent University (NTU) when she heard about HeadStart. *"I couldn't believe it was free and jumped at the opportunity,"* she says. *"I'd lived in London, Leicester and Newcastle, but this was the only place that offered such a great fast-track course and facilities right on my doorstep. May had heard about The Hive through word-of-mouth, "I saw the website and met staff whilst I was studying for MA."*

The supportive mechanism

For her first year, May was based at The Hive with her own desk, hotline and meeting room. *"It was really helpful to have a physical space in such a professional environment. If I ever needed advice, I could pop in and see one of the mentors. As it's an integral part of the University, The Hive is also ideally located for a creative professional like me and I continued to have access to the invaluable expertise and resources I'd enjoyed during my course."*

"It was the perfect starting point for all the essential business skills that I really knew nothing about, such as legal information, accounts, costings, financial planning and marketing."

May continues to rely on The Hive's expertise through the SmarTrak programme of ongoing mentoring. "I feel confident in most areas of business due to what The Hive has taught me, but if I'm ever unsure of anything, there is always someone there to help and make sure I'm on track," she says.

"My mentor helps me see my goals clearly through busy and stressful times. I also receive regular emails from The Hive, keeping me up to date with the latest business news, competitions and networking opportunities, which is really useful. And, of course, I've been introduced to some amazing entrepreneurs in Nottingham."

The main ways in which The Hive's services have assisted May is by providing her business with a physical space in a professional environment for her first year, giving her support and confidence in business, keeping her up to date with the latest competitions and networks to get involved in, giving her access to Universities facilities and introducing her to other successful entrepreneurs in Nottingham..

Business evolution

Before she set up her business, Regenerate, May worked for an NGO in India, called the Barli Institute, which helped women from lower castes learn to read and write and build skills for making a living. She taught dressmaking, Batik and embroidery. Immediately afterwards, she got a scholarship to study for an MA at NTU and she worked on an eco and ethical high-end fashion menswear range. Regenerate Clothing is an offshoot of this.

Regenerate was launched in 2008 during London Fashion Week. Since then, May's progress been studded with accolades– from winning a regional green business award to being shortlisted as the UK Fashion Entrepreneur of the Year and being invited to Indonesia by the British Council as a pioneer of ethical fashion. Her work has also been fêted in publications like Vogue, Drapers Record and Marie Claire.

Such success has enabled her to run ethical fashion education campaigns alongside her business, encouraging design students to make the right choices. *"Eighty per cent of the crucial ethical/eco decisions are made at the design stage, so we hope our campaigns will have a huge impact on the industry,"* she explains.

May wanted to fight poverty with fashion, and cater for the demand on the high street for ethical clothing. Outside of London there is little choice, and not much is available in small independent stores, Regenerate caters for that need in the market, whilst remaining style conscious.

May's personal characteristics

May is a determined social entrepreneur and her business model is based on benefiting society. She feels that the unique features of the business are that Regenerate is all about fighting poverty, helping the environment, and using eco intelligent fabrics. The fashion label is sold all over the world and they create clothing that their customers can look good in whilst doing good.

May says, *"all our profits go into launching new products and new appeals. For example, we have just finished a collaboration with Jon Burgerman and Nick Chaffe, to help street kids in Indonesia, giving them shelter, education and somewhere to play"*. She adds, *"we also run ethical fashion education campaigns for students of all ages, helping them to make the right choices as a designer early on."*

Since setting up, Regenerate's biggest achievements/milestones have been; winning the Green Business award in the first year of business; being featured in Vogue, Drapers Record and Marie Claire; taking orders from places

as far away as Australia; being taken to Indonesia as a pioneer of ethical fashion by the British Council to open up more business opportunities; and being shortlisted by the British Council as UK Fashion Entrepreneur of the Year at London Fashion Week.

May's biggest challenges were overcoming the initial rejection of her business idea, failing to win competitions and being rejected by stockists. *"But now I have learnt that life is a great teacher, one door closes and another is always waiting to swing open, allowing for new opportunities and success stories. In any business picking yourself up after a knock back is the hardest of all challenges, and I am lucky enough to have a great support system,"* she says.

May's next key target for the business is to *"launch a line made in Indonesia, working with producers using fair trade principles; launching Kids helping Kids; launching a high end dress line made in UK; and undertaking my education campaigns internationally,"* she says. May's ultimate goals are: to create outstanding fashion collections; to see Regenerate become a much loved British brand sold in every city in the UK; to sell her collections all over the world; to build a school for Street Children; and to continue to fight poverty with fashion.

CASE 4.4. TEACHING NOTE

This case study focuses on exploring how social entrepreneurship can benefit society and at the same time ensure the viability of a business. It aims to inform students and professionals about the emerging business practice that is social entrepreneurship. The case can be provided as teaching material in order to generate in-depth discussion in the focus area. Readers should be able to gain more detailed knowledge of social entrepreneurship and how it can have an effect on business success.

Suggested questions for discussion, to initiate debate or for use as themes for follow up work.

Question 1: Why are collaborations important?

Social entrepreneurship is emerging across Europe and new organisations address contemporary challenges by applying non-conventional initiatives that aim to bring social change in a sustainable way. This entrepreneurial spirit that uses innovative ways to pursue social objectives by creating products, services or structures that cater for social needs is a vital element towards sustainable development and the restructuring of regional economies.

Question 2: How do social entrepreneurs achieve their aims? How did social entrepreneurship help Regenerate grow?

Social entrepreneurs achieve their aims through realising innovative solutions to social problems, utilising under-used resources (e.g. people, premises, equipment), improving service delivery, and responding to identified community or client needs. By acting in this way social entrepreneurs can contribute to the efficiency of the economy as well as attaining their social goals.

May's business has been actively involved in social entrepreneurship and her strategic target is to help in fighting poverty. Regenerate reaches its aim by selling customers quality clothing and doing good at the same time. This business model has helped Regenerate to quickly gain international prestige by winning important titles whilst helping the business to grow

Additional Readings

GUNN, R. and C. DURKIN, eds. 2010. *Social Entrepreneurship: A Skills Approach*. Bristol: University of Bristol.

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Case 4.5. Centaurs and Entrepreneurs in the Bulgarian Equine Industry: The Case of Novex Horse Riding Club

*Maya Hoveskog, Ph.D, Halmstad University, Sweden*⁵⁵

*Svilen Kunev, Ruse University, Bulgaria*⁵⁶

Abstract. This case study is based on results from research and collaboration between Vaggeryd municipality, Sweden and Jönköping International Business School, Sweden. The last stage of this long-term research project was to increase understanding of entrepreneurship and equine-related business organizations in two different contexts (Bulgaria and UK).

The equine industry is growing organically and is an unusual context in which to study entrepreneurship.. This case is based on both primary and secondary data, resulting from extensive empirical research and displays the tradition of horse breeding in Bulgaria, together with some contemporary aspects of the sector. The focus is on one particular Bulgarian equine business from the Ruse region of Bulgaria – the Novex horse riding club and its owner Mr. Emil Rusev. However, it also incorporates the points of view of the other studied Bulgarian equine entrepreneurs (Centaurs). The attitudes towards horse riding, strategies for attracting customers and some steps for overcoming obstacles in Emil’s entrepreneurial activity are presented. Possible options for future development of the Novex club and for the whole equine industry are discussed.

Introduction

The ancient Thracians, Indo-European tribes inhabiting the Eastern, Central and Southern part of the Balkan Peninsular, cultivated a close bond with horses. They had good knowledge and skills in agriculture and horse breeding and an important part of their army was horse riders. Therefore, horses had a central role in Thracian lifestyle, religion and culture. The Thracian horseman Heros was the all-knowing and all-hearing Thracian god of hunting, fertility, life and death⁵⁷. The Thracians worshiped the horse as a symbol of their god’s might, and it is no wonder that Homer describes the Thracians in the Iliad as ‘*famous horse breeders of the biggest, finest and strongest horses, faster than the wind and whiter than the snow*’⁵⁸.

The Thracians are ancestors of the modern Bulgarian nation. So how much of their heritage is still preserved in modern Bulgaria?

It is always fascinating to listen to peoples’ stories, perceiving their different point of view, following the dynamics of history. Bulgarians are proud of their Thracian ancestors and their traditions in horse breeding. Furthermore, they emphasize that the Bulgars, semi-nomadic people and also ancestors of modern Bulgarians, also had a close connection with horses. The Bulgars had the typical culture of nomadic equestrians and like the Thracians horses were part of their religion. Bulgars, in the person of Khan Asparouch, created the Bulgarian country in the year 632⁵⁹. This part of the story demonstrates clearly that the ancestors of modern Bulgarians

⁵⁵ Maya Hoveskog –participant in research project on Equine industry and co-author of “Centaurs and Managers. Stories from Two National Contexts – Bulgaria and UK”.

⁵⁶ Svilen Kunev – structuring of the text, on site interview at Novex club

⁵⁷ MARAZOV, IV. 1994 The Mythology of the Thracians, Sofia.

⁵⁸ Cited in the biggest Museum of the Horse on the Balkan Peninsular, located on the Kabiuk complex territory.

⁵⁹ ZLATARSKI, V. 1994 *Bulgarian History in the Middle Ages*, Sofia: “Marin Drinov” Publishing House.

were heavily dependent on horses for any aspect of life, religion and culture. All this heritage and knowledge was lost due to the yoke imposed by the Byzantine Empire (1018 - 1185) and the Ottoman Empire (1396 - 1878), which comes as a reminder that the existing tradition in horse breeding and equine-related activities is the result of knowledge, work and selection done only in the past 115 years.

Keeping and restoring the equine-related traditions necessitated large mainly state owned studs. This was not only because of the demand for horses in agriculture and logistics but also because warfare required an increasingly large and powerful cavalry. In order to be able to produce these more efficiently and in large numbers, horse-breeding became concentrated and more efficient. This was in contrast with the several centuries long tradition of not having controlled horse breeding. The mares were put out together with the stallions in the large fields and breeding was rather left to chance. However, people soon realized that allowing the best stallions to cover particular mares would lead to an improvement in the quality of the breed. Whether passed on by word-of-mouth or in written form, this information constituted one of the nation's most valuable possessions.

Since horse studs are not generally profitable structures, there are contrasting opinions regarding their ownership. Experts from the state owned horse stud believe that if they are privatized, both the institutions and the breeds would not survive, as the prime aim of every private owner is profit maximization. Experts from the private sector, however, claim that private initiative could improve breeding quality significantly. They agree that if people with only pure business interests take over the studs they can destroy them, but not the enthusiasts that are in love with horses. But then what makes these equine enthusiasts so different and special? How can they be characterized? What is their background and motives? What is their equine related business? How do they manage to start-up, develop, sustain growth and successfully run such businesses? What factors help them to be successful?

Novex horse riding club and its target customers

Novex horse riding club started its activities at the beginning of 2009. It is situated in Obratsov Chiflik village, only 10 kilometers from the city of Ruse. The club aims to be one of the most modern and multi-functional complexes in northern Bulgaria. *"Everyone who wants to do sport, to recover from city life or just to relax in a pleasant and calm atmosphere is welcomed,"* says Mr. Emil Rusev, club owner and an experienced organizer of



sports activities and restaurant and hotel services.

The Novex complex covers an area of 32,000m² and includes two mini football grounds with floodlighting, a beach volleyball ground, and a regular size football ground. All the fields are naturally grassed. Important elements are the specialized facilities for horse riding and sport, stable, a restaurant, a swimming pool, guest rooms, an open-air kindergarten and other options for sport and leisure activities.

Source: <http://novexsport.com/>

The club is surrounded by picturesque woods and meadows which help create a pleasant atmosphere.

Passionately discussing the future of the equine related industry, Emil sadly admits that relatively few people are interested in horse riding. There is also “*an age gap for people who ride.*” One rarely sees young people riding and it almost feels that there is a missing generation that could develop as riders and create a base for reestablishing and strengthening the Bulgarian tradition. Therefore, Emil, like the other *Bulgarian Centaurs*, sees *youngsters and their families* as his key target customers. . They also see riding as an efficient way to spark the youngsters’ passion for nature. A good example for that is organizing a summer academy for children where animators will create a good learning atmosphere combining games, reading, writing, drawing and horse riding. This way, children could become familiar with animals and gain knowledge about horses. The idea is to be further developed by means of EU-funding, so the target group could be expanded to pupils from the schools in Ruse. A similar initiative is organizing a free-of-charge youth riding school. Another good example is creating a recreational sport complex which provides facilities for a great number of sports from table tennis, badminton, chess, and darts to football, swimming and horse riding. An essential part of attracting the main target group – middle class families – is establishing a café or restaurant as well as a playground on the spot, so the parents can have some nice food and drink while their child is taking riding lessons or playing. Interestingly, it is predominantly women and children who are interested in riding lessons. For them the overall idea is to visit the site, have good food, spend some time in a natural environment and have contact with animals. Another big target group of customers are amateur riders who can practice, for example, endurance riding. Unfortunately, there is no tradition or a competition league for amateurs in Bulgaria which makes it quite difficult to sustain and increase the interest in that area. In regards to breeding, artificial insemination, training and veterinarian services, the main customers are private owners from all over Bulgaria, but mainly from the northern part of the country. Some of the Bulgarian Centaurs even target their main business on customers from the equine related activities such as riding clubs, horse studs etc. In that way there is a piggybacking effect for the horse business initiatives. Examples of this are offering complete advertising services to equine businesses, riding clubs etc. as well as preparing and publishing a catalogue with different options for semen fluid from stallions both from Bulgaria and abroad in cooperation with Kabiuk.

No matter who the target customers are, the main aim of the equine businesses is to “*be sustainable rather than earn lots of money*”, says Emil. In other words the objective is to earn just enough money to sustain the business and cover its costs. Novex club’s strategy, like that of most of the Bulgarian Centaurs, is to try not to expand its business too much, in order to easily manage it and provide a unique atmosphere, quality services and comfort. Additionally, the aim is to restore and strengthen the Bulgarian equine tradition by actively working to protect the East Bulgarian horse from extinction. This will guarantee the survival of the equine related businesses as well as spark interest and affection towards horses by presenting them in the best possible way. The critical success factors are the need to constantly gain knowledge and having well trained and knowledgeable personnel. These are achievable through building and sustaining an extensive network of supporters and friends. Having a key person running the business is also essential. This person should be able to improvise, find win-win solutions and manage different aspects of the business in a cost efficient way. A good example of the latter is organizing a training programme for potential staff from the orphanages in the city. This is a noble initiative, which is efficient good way to get financial support from the municipality and at the same time mould and bring up young individuals who have been without parental care. Helping these youngsters to appreciate horses and motivating them to work will help them integrate successfully in society. This is one of the very few examples in

which the municipality, representing the state, actually becomes involved in and indirectly supports the equine industry.

The equine industry in Bulgaria

The horse-breeding entrepreneurs established their businesses at different times and for different reasons. Some turned to private initiative due to a dramatic personal event, some started in a more natural way, while others began more by chance. In some cases, equine related activities are not the core of their business, but rather represent what they really enjoy doing. The *Bulgarian Centaurs* are involved in diverse business activities (apart from those related to horses) varying from photo-developing studios, advertising agencies, art galleries, consultancy and transport services to apparel production and trade. On the other hand, representing the state, the Kabiuk complex and horse stud is managed by people with degrees in zoo engineering who are specialists in horse breeding. They have more than thirty years of professional experience of working with horses.

All of the entrepreneurs aim to stimulate interest in horses and increase the popularity of equine related activities amongst youngsters and the general public. Due to the specific historical events and background in Bulgaria, this goal has been a hard one to achieve. Government subsidies before the changes (1989) brought results in terms of the achievements of Bulgarian equestrians in the Olympic Games. Amongst the names mentioned with pride are General Stoichev, Krum Rashkov, Genko Rashkov, Tsvetan Donchev and Rosen Raichev. Additionally, unique Bulgarian horses were bred during this period – the East Bulgarian horse and the Danube and Pleven breeds. Show jumping, dressage and eventing were amongst the most popular equestrian sports. Horse racing and smooth riding were less popular due to the gambling associated with it. Harness races, however, had gained some popularity due to the fact that some of the horse studs specialized in breeding horses with specific qualities for harness racing.

Today, the most popular equine business in Bulgaria is pure horse trading. Foals from abroad are purchased, imported, trained and sold for profit. However, this business is not always straightforward since the imported horses do not always adapt to Bulgarian natural and climatic conditions which results either in serious injuries or even death. Additionally, every foal needs a large area in which to run and develop its muscles. If it lives in a restricted area, a foal could become “crippled”. Furthermore, the process of training a horse is quite lengthy and time consuming. It may take up to five years before a foal is actually allowed to compete. The pure horse traders form quite a powerful group. If an entrepreneur chooses not to use them as intermediaries they create false information to make their business activities more difficult. Therefore, as some of the *Bulgarian Centaurs* claim, these people sometimes determine a club’s survival. It is essential that this dependency is broken down. Additionally, sometimes these people provide their own customers who lack basic knowledge about horses, with incorrect information in order to sell at a higher price, thus seriously undermining the trust in equine related activities.

Quite a similar business is breeding, training and then selling horses. It gives a certain level of prestige as well as enhancing the admiration towards horses. A few quite strong players are already in the Bulgarian market. One of these, Kabiuk, specializes in the artificial insemination, breeding, attestation and selling of horses. The insemination of mares and the birth of good quality foals which might be licensed for breeding later on can be extremely profitable. This licensing is valid only within Bulgaria. First, each horse undergoes attestation after which it can apply for a license within a particular breed issued by the relevant breed association. At the moment the license procedures are not harmonized with the European ones and the Bulgarian licenses are recognized in Europe only in extremely rare cases (e.g. the Shagya Arabian horse in Austria last year). Horses that show the

potential for achieving highly in sport are also valuable. However, the Bulgarian Centaurs claim that, on the whole, horse breeding is not very profitable, not only in Bulgaria but also in Western Europe..

Another equine related business just starting to emerge in Bulgaria is offering riding tourism. The Bulgarian Centaurs use different names to describe it such as hobby riding, recreational riding, leisure riding, amateur riding, equestrekking etc. A specific niche here is hypotherapy for children with certain disabilities. There is an existing demand for it, but the government does not support it in any active or effective way. Usually, it is financed by the EU and most riding clubs offer the therapy as a sideline in order to support the income flow. However, it is a highly specific and delicate activity which requires good management, licensed personnel, equipment and horses.

The traditional equine related business is centered on sport activities. Most horse enthusiasts have established sport riding clubs, where they try to combine all of the above types of businesses including offering stabling, riding lessons, and organizing competitions to promote the clubs and the business. However, the rate of return is relatively low. Additionally, the support of the government is rather symbolic – giving out medals in regional and national competitions as well as distributing money from the National Sport Lotto among all sports in Bulgaria. The riding clubs receive subsidies through the Bulgarian Equestrian Federation which distributes them based on the performance of club members in the competitions listed on the National Sports Calendar. Each club earns points throughout the year which determines the financial support they receive. Since equestrian sports are not as popular as mass sports they receive quite small sums, compared for example with wrestling. Therefore, subsidies given out to the riding clubs cover only a small fraction of the actual costs they incur. In general, there are few expensive horses with wealthy owners or big insurance companies to provide both sponsorship and insurance. There are only a few successful riders who compete in European and World championships, as well as at in Olympic Games (e.g. Rosen Raichev, Ivelin Valev etc.). All other equestrian achievements are at the level of Eastern Europe.

Last but not least, there are many suppliers of services which are part of the equine related business. These include food, nutrition, medication, equipment suppliers, veterinarians, farrier services, among others.

When it comes to support from the municipality and the role of the state in the equine related businesses, it seems that one statement sums up the view of the Bulgarian Centaurs:

“We start up, manage, sustain and expand our business despite the municipality! If you don't have contacts and lobby in the municipality you don't stand a chance of getting things done in an efficient way.”

The state does not help regarding one of the critical factors for success in this specific type of business – the availability of land and maintenance of the infrastructure. There is no control of the landowners' rent increases, and the state, a landowner itself is constantly increasing rents and is generally not willing to decrease the monthly amount if improvements to the property are made (repairs, new facilities, fencing etc.). Lack of long term renting contracts (concessions) is for the major obstacle to making more serious investments which could greatly improve the conditions for equine business. All Bulgarian Centaurs are aware that the state, represented by the municipality, is only efficient when it comes to increasing taxes and complicating the existing regulations. However, all of them have many recommendations on what could be done by the state, represented by the municipality, in order to facilitate the equine businesses. Most of these recommendations are intertwined with the main target customers – the youngsters and their families. Constructing a riding and bicycle road to the

hippodrome or around the town would make it easier for people to spend a day out and would provide easier access to the hippodrome. Providing alternative transport to the hippodrome would also help attract more attention towards these activities. Active promotion of all sports, and not only the most popular ones, could also help to boost the interest in horse riding. Taking an active part in projects that could improve the recreational activities and provide more opportunities for hypotherapy is also desirable. Building water wells could be beneficial bearing in mind the nature of the equine activities, as well as helping in tournament organization. Providing support for attracting a highly qualified equine expert from abroad who could transfer knowledge to Bulgarian counterparts is also a high priority. Providing land for pasture, regulating the price of fodder, facilitating meeting points for trading with horses between regions, having tax relieves for people investing in horses, decreasing the fees for lodging and equipment are just some of the ideas that the Bulgarian Centaurs have regarding the role the state might have in improving the conditions for equine related businesses in Bulgaria.

However, the state has started a small number of activities to support equine related businesses. It supports horse breeding and the very existence of the Kabiuk state organisation is proof of that. It is questionable however, if this support is sufficient. The Ministry of Agriculture also keeps count of the number of horses and their owners for statistical purposes. There are a few opportunities for financial support from the state, related to youth sport activities, but this requires the interested parties to draw up and defend a project proposal. This is considered an overly bureaucratic process and the interest from the equine enthusiasts is quite low.

The Bulgarian Centaurs however admit that it is difficult for the Bulgarian state to support equine related activities since it has to comply with the overall EU mindset, policies and strategies. At the moment the laws that are decided in the EU do not really prioritize equine related activities. In fact, financial support has decreased considerably.

However, no matter what equine related business the Bulgarian Centaurs have, they agree that there is a future for the horse industry in Bulgaria. There is more progressive thinking and more availability of capital. More and more wealthy people are becoming interested in horses. Knowledge and experience from abroad is transferred to the Bulgarian enthusiasts via sportsman who are training and competing abroad. Foreign experts are also visiting Bulgaria. The number of modern facilities, equipment and quality horses are also increasing steadily. Following the world equine trends, horse related businesses are slowly but steadily progressing. It is only a matter of time before the horse industry will present a much more promising picture than it does today.

Some final reflections on the Bulgarian equine related world

Setting up, running and sustaining an equine related business in the Bulgarian context is obviously not an easy task. The historical, political and economic development of the country has predetermined the development path of the industry. The characteristics of the Bulgarian horse entrepreneurs have also had a strong influence on this development. Their stories are quite similar. All of them are strong male individuals; horse enthusiasts; proud of the Bulgarian cultural heritage and strong traditions of horse breeding of their Bulgarian ancestors; passionate about their business and hobby activities; risk takers; dreamers... This also explains the hobby and individualistic character of equine related businesses in Bulgaria.

In the Bulgarian context, it is almost impossible to sustain horse related businesses without having a different main business which is profitable and creating a piggybacking effect between them. There is a delicate balance between the critical factors for success of the business and the problems that are connected with it. One can easily grasp the feelings of the *Bulgarian Centaurs*, reflecting their disappointment in the pessimism and cynicism, which sometimes dominates the equine professionals, together with the magnetism of the horses and

their deep love of these animals. With this as a background, the unstable economic conditions in Bulgaria, combined with the effects of the current economic crisis, require that the equine entrepreneurs have a flair for the business and rely on their own knowledge, abilities and skills. Taking risks and managing to carry on even after a setback is an inseparable part of their business. A strong belief in their success and the useful advice of their closest friends are also essential. In accordance with the traditional business mindset, being a charismatic leader who is able to motivate the staff and having good managerial skills, including financial management, are also considered as critical factors for success. In addition to this, having sufficient financial capital, availability of land and modern facilities could boost the success of the business. It would also be beneficial if the state and the local municipalities encourage these activities.

As a result of the different aims and managerial practices of each of these sectors, the results and consequences have been different. For example, the state provided subsidies to compensate for the lack of interest in equine related industries, but at the same time did not invest resources in developing good educational programmes. This might be one of the underlying reasons for the deficit in knowledgeable and skilled labour. However, the professional and knowledgeable personnel are concentrated in the state-owned horse studs where most of the subsidies went. Even though at the moment only one horse stud has survived the economic and political changes in Bulgaria, the state is trying to protect it from bankruptcy, educate the personnel and help to develop a good horse breeding program.

Despite the somewhat pessimistic picture described by the Bulgarian Centaurs, all of them conclude that equine related businesses do have a future. There are many ideas and plans for further development and expansion of the businesses. These ideas reflect the entrepreneurs' enthusiasm and affection towards horses. The strong will to stimulate young people's interest and close the existing generation gap are just two of the tools to build up a strong knowledge-base and restore the almost extinguished Bulgarian equestrian tradition. Additionally, the entrepreneurs are determined to significantly improve the existing infrastructure and have vast pasture areas which could be used both for recreational activities and for horse breeding, thus creating picturesque scenery, which is good for the spirit and mind and can help raise the level of interest in horses:

"[We] don't focus too much on the threats for the business but rather look ahead and stay positive about all development possibilities. As in any business there are so many threats. If we focus too much on them it may jeopardize our chances for success. That's why we only perceive them as a challenge and stimulation. You always have to try....Our equine activities are not simply a business, they are our way of life..."

CASE 4.5. TEACHING NOTES

Overview

This case is based on results from research and collaboration between Vaggeryd Municipality, Sweden and Jönköping International Business School, Sweden. The last stage of this long-term research project was to increase our understanding of entrepreneurship and equine related business organizations in two different contexts (Bulgaria and the UK).

The equine industry is growing organically and constitutes an unusual context to study entrepreneurship. This text is based on both primary and secondary data, resulting from extensive empirical research. The case displays the tradition of horse breeding in Bulgaria, together with some contemporary aspects of the sector. The focus is explicitly on one particular Bulgarian equine business, in the Ruse region– the Novex horse riding club and its owner Mr. Emil Rusev. However, it also incorporates the points of view of the other studied Bulgarian equine entrepreneurs (Centaur). Attitudes towards horse riding, strategies for attracting customers and some steps for overcoming obstacles confronting Emil's entrepreneurial activity are presented. Possible options for the future development of the Novex club and tendencies for the whole equine industry are discussed.

Intended courses and target audience(s):

The case study could be successfully used in courses dealing with basic principles of management, management of growth, entrepreneurship, etc. Target audiences are students on bachelor and master's degree courses, together with experts, managers and business owners.

Training Objectives

- To examine of the key internal and external factors for the success of the entrepreneurial activity;
- To identify possible threats and opportunities for the business unit within the specific industry;
- To formulate overall business strategies for improving the performance and success of the entrepreneur;
- To define specific approaches for attracting customers, creating business and determining the social value of a business idea.

Suggested Questions for Discussion

1. What is the current state of the Bulgarian equine industry? Make a situational analysis. Use Porter's five forces.
2. What changes have occurred throughout time in the equine industry?
3. What are the driving forces in the equine industry?
4. What makes these equine enthusiasts so different and special?
5. What is their background and motive?
6. What is their business idea and how do they manage to create value for their customers?
7. What is their equine related business?
8. What is their key to success in starting-up, developing, sustaining growth and successfully running such businesses? What factors help them to be successful?
9. How do the Bulgarian equine entrepreneurs create value for the society?

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Case 4.6. *3iDS*: R+D sustainable

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Abstract. *3iDS* was created as a result of a combination of vision and tenacity of a few researchers in the field of mechanical engineering, whom over a decade ago clearly perceived the importance of economic growth and social welfare improvements in terms of sustainability. Four members form this peculiar company which was created in the University. They specialize in engineering services, consultancy and training in sustainable development. Its commitment to help countries with economical and social difficulties and in the region of the company as well is laudable. The study of this business which combines technology and social responsibility in an unusual manner makes this case more interesting. No stranger to the difficulties of starting up a new company, it takes firm steps towards the internalization of its services.

Key words: *R&D, spin off, sustainability, engineering firm, internationalization.*

Long before Al Gore began his particular crusade against climate change and the resistance of people to take on their day to day responsibility for same, and even before that, special attention was paid particularly to the green house effect and the consequences of this massive pollution to the planet, Roque Calero was clear: managing is not the aim, it is managing in a responsible way, the resources we have now that is the priority. So this professor with a friendly disposition but with unshakeable determination, decided to put all his knowledge into the environment. A promising career in research and his professional experience in relation to project development in renewable energy and water management was his determination to change the vision of institutions, using his own company as the key to introduce himself to the business world.

With the help of Jose Antonio Carta, also a professor at the university and also linked to Roque's team, the business idea emerged with the intention of giving value to the research they were carrying out in the Mechanical Engineering Department at the University of Las Palmas, in Gran Canaria. Hence *3iDS'* was created in 2008 by 4 partners, as a collaboration project. Roque Calero, who holds the majority share of the company together with his colleague Jose Antonio Carta, are those who contributed their knowledge and necessary contacts for the project development. Together with them, Alex de Wilde who was not so much involved with the project start up but strongly committed to the implementation of the company, especially in its early days added managerial expertise, and Jose Martin, a former student of Roque's, focused on the search for public funding for interesting development projects.

Jose is currently in charge of the administration and business management of the company as well as being listed as an administrator from the very beginning. He is the one who spends all day in the company and is always available when needed. However, and besides these more administrative duties, he is the one responsible for product development and prototypes. The particularity of the entrepreneurial team is that, while maintaining the same basic training -they are all part of the mechanical engineering industry-, each of them has assumed a different role in the company.

Roque, strongly committed to the company, spends every day at the company premises to monitor the good work of the many projects currently under development. He is the one responsible for consulting services. His knowledge and experience in commercializing the sustainable development plans to the various institutions is essential although the carrying out of the projects is completed with the rest of his colleagues. Jose Antonio

meanwhile is an expert consulting adviser in several areas, but focuses more on engineering projects than on those of consultancy, in addition to having extensive experience in the development of feasible studies for engineering projects.

The company was founded with a strong strategic orientation, being defined as “an engineering company that emerged from the university, whose main activity focuses on engineering Projects, applied research and innovation, with a special emphasis on products and planning for sustainable development”². In addition, and as they themselves state in the company’s corporate brochure, the company was created for international research and development, with the intention of promoting the search for new knowledge and innovative technology that creates value and ensures the sustainable development of territories. The values that govern the institution are: honesty, commitment, customer orientation and excellence, amongst others, showing particular concern for balanced development of the countries. Furthermore, in their mission statement, they do not ignore the vocation of service to the community including their concern for sustainable development, the foster of business activities through Research and Development, and supporting the employment of young graduates into the region.

It’s services are offered to both, the public and the private sector, concentrating on two main work areas: training and consultancy services, and engineering services.

Consulting services are specified as sustainable development plans specifically aimed at institutions. This is the star service for which the company has come to be known. They define it as global plans and not just territorial plans. The primary focus and main difference to other companies are their strategic sustainable development plans that they offer as a variant to the traditional strategic plans and whose characteristic is to develop strategic lines of action that respect the environment while respecting the quality of life of the citizens of the communities where they are implemented. They offer non common plans because their offer is analyzing the different areas of development in different levels –locally (a town), district (a group of towns) or regional (Autonomous community)– in order to detect the basic needs of the territory –water, energy, food supply, residence,... –, its characteristics regarding the transfer of goods and services –industry, marketing, distribution,.. –, culture and heritage, as well as its governance from the perspective of sustainable development. This is to say, trying to harmonize the offers with the assurance of existing and future quality of life and well-being of the region. It is in this area of service that Roque dedicates his time, in particular to the project of sustainable development in the south east region of Gran Canaria with which it has been linked from the very beginning and from where the region itself has received international recognition⁶⁰.

Within the *Engineering Services* two types of projects are developed, both of them on request, and mostly in collaboration with the client: (a) the design and manufacture of machines and components, including prototypes and experimental designs, and (b) the development of renewable energy systems for different applications, such as the desalination of water, sustainable energy supply, mobility of electrical vehicles or facilities for the production of food and housing or residential complexes. Along these lines, the studies of technical and economic viability of projects in the field of renewable energy and engineering products stand out. That’s to say, they meticulously analyse the viability of machinery, prototypes and pilot plants. They carry out the design, calculation and manufacturing of any product, component or machine that does not currently exist on the market or the substantial improvement of what already exists. All of these ordered by institutions, companies or individuals. As a company whose hallmark is research and development, they try to devote a significant portion

⁶⁰ See in more details, the plan of the area on:
<http://www2.gobiernodecanarias.org/empleo/portal/portalColaborador/agentes-empleo-desarrollo-local/mainColumnParagraphs/d06/plan.pdf>.

of their time to the development of prototypes, pilot plants or demonstration plants so that the client can make the final project for the marketing of products or for the productive use of the plants.

In this line of work we may include development aid projects, highlighting amongst other things the focus on water management and energy efficiency in the Maghreb countries. These projects are unique in being self-sustainable developments, which is to say the engineering team does not envisage the development of projects that are inoperative once the technical personnel of the developed countries leave the country. The key to their projects in this field is that the population must be capable of keeping the ingenuities working, even in the absence of spare parts. It's what is known as project development in isolated regime. They develop ingenuities at low cost and easy maintenance so that they can be implemented in rural areas or villages in Africa or South America. These projects are carried out in collaboration with local personnel, in order to transfer *know-how*. Because of this, funds are fundamental to the development and the collaboration with charity organizations in localized areas where the mills are finally developed. Actually a project culminating in this line of work is for example the development of a machine to extract water from wells in a village in Mauritania. With this approach, they try to avoid the common neglect of many western technologies in developing countries. These projects are still non profitable for the company but it allows them "to acquire an experience that gradually bears fruit" says Jose.

Forming this tradition has also led them to develop any *training course* required of them in the management of technological innovation, mechanical engineering and sustainable development. This work is especially important in forming sustainable development: "the current crisis is not only economic but also energy based and it is necessary to create an awareness of this. [...]. This, in addition, is particularly important in the Canary Islands due to its high external dependence. Initiatives in these islands can be seen in line with this change, but political willpower is extremely slow when it comes to putting it in practice".

Especially in the first line, of consultancy and training services, and in part of the second line of the development of engineering projects –Charity organization Project developments– are public institutions the potential clients for the company. The second group of services is dominated by business type customers and individual customers. In the latter case, they try to reduce project costs for customers seeking funding from other agencies and government aid for Research and Development. Nowadays they develop, for example, an important safety device for ambulance technicians. Nevertheless, if the development needs are not mechanical components but actually electrical, chemical, etc, they join with other companies or university researchers, forming ad hoc groups to develop the project.

In general, all the projects that they develop are "new and require a lot of creativity on the part of the team that forms the company" says Jose. The company currently has two employees, who are linked initially through a scholarship and because of their enormous creativity, diligence and entrepreneurial impetus, have completed the staff of the business. The burden of the project pivots between Roque Calero and Jose Martin, in addition to the full time employees who look after the running of the projects being undertaken by the company at all times. Currently they carry out an average of 7 or 8 projects a year, spread out into equal parts between consulting and engineering. In the company everybody does everything. The employees are very versatile.

The location of the premises, since its creation, is in the Science and Technology Park at the University in Las Palmas, Gran Canaria, although this has an expiry date, as they are only permitted to stay 5 years in these premises which act as an incubator within the university. They will have to carefully consider the new location as the current location offers many advantages, especially for its proximity to business and industry research groups. They are in doubt as to temporarily extend their stay at the Park with the advantages and services and

also the low costs it provides, or relocate to new premises outside the Park and take advantage of the lower prices which have been generated by the economic crises.

The original share capital covered the legal minimum amount needed for a limited company, covering an infrastructure investment of approximately 15,000 Euros which the partners themselves financed. Although they are still unable to pay its employees the same salary as the competition -the current salary is 25% less than that of the sector – the employees are motivated more by the interest of keeping the business running and making it grow rather than of their financial gain. They have all had to assume a certain risk and a commitment and in addition, “so far, no benefits have been shared” said Joseph. The majority shareholders do not receive a salary, they invest all their time to the company by their sheer commitment to the project and their great love for what they do and by the original idea that inspired the creation of the company.

However, they have had bad times due to the lack of liquidity, and on many occasions it has taken a long period to be paid and as a result they have suffered their own cash flow problems. Nonetheless payments have been covered so they have not had to seek expense credit facilities which were available to the company.

Since a significant amount of its turnover comes through public administration, they do not deny the enormous concern that changes in the government generate, and the uncertainty that this situation presents with regard to payment and contracting, given that many of the consultancy projects by their nature deal with the public administration. They praise initiatives such as the association of the south-east of Gran Canaria in that an agreement between all the political forces assumes the importance of governing with sustainability criteria, which is in no doubt the usefulness of this strategic planning.

They believe that diversification of their product portfolio is key for the competitiveness of their business. This way, they believe that they have competitors in all fields -locally, nationally and internationally-. In addition, “in this university (for the ULPGC) *software* and programming companies exist and are linked to ITC but not so much linked to the so called ETC, the technologies for development of products and not of *software*”. However, on a local level, engineering projects and its competitors are more so collaborators, since they are accustomed to being mutually subcontracted for the development of a certain type of project so that their cooperation is common between them and other companies or research groups in chemical, engineering, electronics and *software* development. In fact, the facilities in the Technology Park do not include the workshop, so that the entire development of prototypes is carried out under a collaborative agreement with a company that has its production facilities and processing laboratory on the university campus in front of the Technology Park. They have the necessary machinery to produce and mold parts, as well as make prototypes of small dimensions. *3iDS* is not a specialist in manufacturing but in design, as they themselves state.

Regarding the development of strategic environmental plans, the international outpost brings them to Hawaii with an unusual development of sustainable plans that has provided them with extensive knowledge and experience in the field. In Spain, Vizcaya timidly appears with similar plans as *3iDS* way of planning, but still a lot remains to be done in this field.

They see numerous obstacles in the way of the expansion of the company in Spain, which is why South America, especially Mexico, is an attractive location to develop their projects more successfully, avoiding excessive economical, administrative, and political restraints. Their projects could have wider exposure in these environments. The popular saying states “nobody is a prophet in their own country”, they believe that in their case it is particularly true especially in relation to the first line of services related to sustainable development.

Although in the years 2009 and 2010 they have **met** their predictions forecast in their business plan, in 2011 and 2015 they do not believe that they will reach the figures proposed. However, the business objective is to grow with the coming years: “In 2015 They expect 15 people to be working in *3iDS*”.

CASE. 4.6. TEACHING NOTES

Overview

This case presents the characteristics of a university spin off in which they develop consulting services, training and engineering projects, with a clear vision of the business in sustainability development that, driven by two university professors, take on the important social orientation based on Research and Development. These are the two centre points which support the case. On the one hand, the possibility of generating valuable through research and development from the universities and, on the other hand, they can do all this while maintaining a vision of social and environmental commitment, both in the field in which the company is situated, as to the rest of the world, especially underdeveloped countries. This case illustrates the most incipient phase of the internationalization of the company. In addition it presents a business plan in cooperation with potential competitors that opens many possibilities for the development of small businesses in the Research and Development sector.

Intended courses and target audience

This case is aimed at students interested in characterising the process and guides to the creation of a company, especially technology based. It can also be used with managers to address strategic planning issues and internationalization, as well as for specialized courses in the development of academic spin-offs.

Highlights of the story – what are the main issues that need to be addressed/not to be missed.

The professor should focus a good part of the class discussion on the problems that affect companies of these characteristics, highly orientated in offering services to the public administrations and the production sector. It is important to point out the difficulties that the company faces as with a clear international vocation, it is important to resolve their internal management problems and maintain stable revenue in order to make the final leap into the international market to which they are headed. Also give value to the “co-mpeticion” strategies, and to the idea of that social and environmental responsibilities are not only exclusive to large companies. This can also be a subject for debate in this case.

Suggested Teaching Techniques: how the lecturer could approach the audience, defining the team or personal roles, requirements, time framework.

It would be convenient for the students to have at their disposal the case, prior to the class discussion in order for them to read it in depth. Also, they would have the opportunity individually or in groups to investigate the company and its projects that it has developed or could potentially develop. To find information about the environmental consultancy sector could also be an interesting activity.

During the course of the classroom discussion students should form work teams and should discuss the following points.

1. Present and discuss the sector characteristics in which the company is developing and the activities and projects that it is carrying out, complementing the information presented in the text with that which the students have previously been able to collect.
2. Review with the students each of the key issues of the entrepreneurial process which are presented in this case, such as the way to detect the business opportunity, the role the research team play in the creation of the company or the decisions taken regarding the corporate governance of the company and the personnel policy.
3. Propose alternatives to address the emerging internationalization of the company, justifying the proposals.

Teaching/Training Objectives: what readers/students are suggested to do, what should the main findings be like (general fields of decisions); main skills and areas of knowledge to be obtained.

The student should be able to:

- Identify the phases of the entrepreneurial process.
- Document on the Environmental consulting sector.
- Carry out a SWOT analysis for the business idea.
- Identify the problems which the company faces with regard to internationalization and possible alternatives for its development.

Suggested Questions for Discussion, intriguing questions to initiate debates or even main themes for follow up work.

- How are the service sector for companies and institutions on environmental matters?
- Identify the elements that form part of the *3iDS* business model.
- What obstacles/barriers may the promoters of the company refer to when stating “that prevents the expansion of the company in Spain”? List the factors that may impose limits on the development of companies in this sector.

Assessment criteria (optional, upon case author’s decision): logical structure and consistency of the analysis, scope, depth and reliability of the informational resources, own empirical studies of the case research teams, purposeful and practical application of the suggested strategies/decisions;

To be determined by the professor according to the degree of depth with which they address this case.

CHAPTER 5. GROWTH AND EXPANSION

5.1. View to Success (NTU)

5.2. Pulse Student Network Limited (NTU)

5.3. Electro Power Systems (POLITO)

5.4. NIK-05 Ltd (RUSE)

5.5. The development of a winning business model: The case of
ihavemoved.com (CYU)

5.6 A micro consultancy with a European business: The case of Europa
consultancy Ltd. (ITC)

Case 5.1. View to Success: knowing when to let go!

By *Paraskevi Gkiourka and Kostas Galanakis*, Nottingham Business school, Nottingham Trent University, United Kingdom.

Abstract. This case study demonstrates the leadership style applied during the rapid growth of a consultancy company, 'View to Success'. The company grew rapidly due to the commitment, leadership and energy of the owner, John Hills, a Staffordshire Polytechnic graduate. The company grew along with an increasingly high volume of new work tasks and responsibilities managed by the owner. It is evident that further growth of the company depends upon the willingness of the owner to adopt a leadership style that delegates responsibilities and control, reflecting the requirements of a fast growing business. This case study analyses the leadership style of the business, and generates discussion on how the company's management structure can be developed to reduce central control, promote greater flexibility, and employee autonomy.

Keywords: *leadership style, management, entrepreneurship, control*

Introduction: background and inspiration

John Hills started out as a British Gas apprentice and moved up to become the Commercial Director for the contracting division of East Midlands Electricity plc.

"I earned rewards in terms of money, plaudits and a Mercedes, but there were many painful lessons too...", he says.

He clashed with colleagues about his centralisation plans and eventually left the company. After a period in the wilderness, he decided that he wanted to implement his own dream. *"I had a vision of a new way of working,"* he adds.

The power of his vision and the breadth of his imagination led to him launch his own company, called 'View to Success', which quickly became successful. Based on people-centred principles of encouragement, honesty and satisfying the need for recognition, it reflected his disillusionment with traditional business values. View to Success is a consultancy company that specializes in innovation, economic development and decision support software for the public as well as the private sector. The company offers improvement tools for current businesses, advisers, and support organisations; consultancy and training; managed services; and practitioner development. John has been the organisation's Chief Executive since it was launched in 1995.

View to Success has seen rapid growth within two to three years. Personal vision, creative ideas and a forceful character have brought John Hill and his company big rewards. The company has grown to 65 staff and sales of £3.2 million. During that time the company's offices expanded to Leeds in the north of England. View to Success has been responsible for a number of national programmes, and in many ways has been influential in shifting national business-support policy and strategy. All this development was mainly managed by John who rightly considers himself so central to the game plan that he finds it hard to step back from direct involvement in all aspects of the company's operations.

The current situation

View to Success now operates the UK Benchmarking Index for the Department of Trade and Industry (DTI), a programme that helps companies compare their performance with others. It recently renewed a three-year contract for the DTI's interactive best-practice programme, 'Connect for Better Business'. The company also delivers staff-development programmes focusing on a variety of aspects such as promoting innovation, winning managers, winning leaders, business transformation and knowledge transfer.

"It is a deliberately broad portfolio for a small company," says John Hills. "We create and develop management-development services for distribution in partnership with bigger organisations in the same way as software development houses distribute their products through big IT firms."

View to Success has also worked in partnership with Price Waterhouse Coopers and Staffordshire Training and Enterprise Council to develop the 'Success Managers Programme, which uses new techniques to make training an integral part of a manager's working day.

"More than 350 managers have been through that 10-month programme, and not one of them has dropped out," says John.

By the end of 2010, John is confident that the 'Success Managers' programme will be operating overseas with a tenfold increase in course members and that View to Success will have sales of £8 million. He foresees no change of ownership of the company, which rests 100% with him and his wife.

"We have traded in the black since day one and have no liabilities except a £190,000 commercial mortgage," John says. "We have substantial reserves and this year we'll make a profit of £750,000."

Joint ventures and acquisitions are possibilities, but John would consider a merger only if his company– based in Barlaston near Stoke-on-Trent– was the dominant player.

"Our best route forward is to distribute our products and services by riding on the back of a larger organisation such as a big accountancy or consultancy group," he says.

Identification of the problem

In terms of human resources, the company is focused on identifying people who share the same passion. This is derived from the owner's beliefs that the company's success will largely depend on applying people-centred management principles to its own operations. This may sound hypocritical, but in fact it shows John's passion. John is so committed to his vision of a new business philosophy that he feels the need to lead staff at every stage of the mission.

"The painful experiences in my career have given me a need for control and leadership. But I have learnt that if a leader is too strong it can be threatening to staff. I have to make a conscious effort to trust the people that I have empowered."

If John had any doubts of his tendency to overpower staff, this was made plain by a survey of staff attitudes that he recently commissioned. More than 70% of the personnel disagreed with the statement that 'there is an effective and open communication throughout the company.' An even greater percentage of staff thought that they were encouraged to express opinions and come forward with ideas, but opinions were split on the effectiveness of continuous professional development within the company. John was forthright in his grasp of the problem.

“The easiest way to address issues is to tackle them head-on with honesty, and to face up to the hard decisions that have to be taken. View to Success has grown enormously, but we could have done more. Much of that failure relates to me. I am good at generating ideas but we do not harness them effectively because we are always moving on to the next thing. Our market penetration and revenue generation has slowed, as a result,” states John.

The major reason for the success of the company is becoming an obstacle

View to Success grew so fast because of the enthusiasm, eagerness, compliance and motivation of John Hill. His leadership style which, includes an overpowering need for control, has its roots in a meandering career path marked by periods of pain. This leadership style can be characterised as paternalistic. A paternalistic leadership style is defined as being strongly hierarchical (Antonakis, Cianciolo and Sternberg, 2004). The superior assumes the role of the father towards the subordinates, whilst the subordinates show loyalty. The superiors are assumed to know ‘what is best’ for the subordinates. Such a leadership style is concerned about the well-being of the subordinates as well as their families (Antonakis, Cianciolo and Sternberg, 2004). Although paternalistic leaders care for the needs of their subordinates, they do not exploit them accordingly to achieve high performance (Nagendra and Manjunath, 2008). Peter Johnston, the company’s recently appointed operations director says:

“John is still a bottleneck at times and that can sometimes be a problem. He’s a busy man who is always out and about. It’s difficult for him to find time to keep me up to date on what is meant to be happening. He needs to take his finger out of the pie.”

In order to maintain the high level of performance of his company, John needs to employ a different leadership style that will include delegating responsibility for the management of his company and adopting appropriate leadership strategies.

Strategies for overcoming the difficulty

One attempt to achieve a solution to John’s insistence on not letting go, was to move the company’s design and creative services into a separate business – named ‘Outside the Box,’- in which John has only a 50% share. He is prepared to consider the possibility of taking a similar approach with other streams of business in the medium term. For the moment, efforts have been concentrated on developing a better balance within the company.

The recruitment of “a very different animal,” in the form of Peter Johnston, a “systems-oriented, process-driven” operations director, was central to these.

“John is an entrepreneurial leader with vision and ideas, but he is not a finisher. I take his thoughts and make them happen. Our skills are complementary,” says Peter.

However, the balance between the leader or thinker and the finisher is not an equal one. John and his family live in the farmhouse next to the converted cowsheds where the offices are. A typical working day for John starts at 5 a.m. and he usually returns to the offices only after his children have gone to bed. *“I’m almost never not at work,”* he says.

His wife Judith works for the company having been a teacher for many years.

“Staff was understandably wary about that, but it fits with the company’s strategy and Judith has a genuine role to play. In the same way, the staff of the company is like a second family to us. We have all shared intensive team-development exercises to brainstorm strategy for the next three years and to define all aspects of the vision

in terms that everyone can understand and believe in. There is a fantastic buzz of energy here and a great feeling of camaraderie,” says John.

John’s belief is borne out by the staff survey, which shows high levels of motivation, a strong team spirit and shared working values. But the survey also reveals flaws in management structure, with a lack of feedback on individual performance and insufficient day-to-day help from the managers.

This culture is perpetuated by a recruitment policy that focuses on finding staff that share John’s vision.

“The recruitment procedures are rigorous. Applicants are vetted by existing staff to ensure shared beliefs,” he says. “I’d love to find another me.”

However this policy has an impact on operations and according to Peter: *“John is a mentor as well as a boss. When people have bought into his vision, they can be unsettled in finding themselves reporting to me.”* John’s people-centred vision of business is an intoxicating one for many. John says: *“If the working environment is one of honesty, fun, stimulation and clarity of purpose, the people who work there will be intensely loyal, creative, strongly motivated and self-disciplined, so positive results, in the form of a growing business and greater productivity, are inevitable.”*

The core difficulty faced by View to Success lies in the practical implementation of this evangelical vision when the power lies in the hands of the visionary and his disciples. According to Peter the biggest challenge now is to *“take the company forward”*.

Concluding remarks

The strength of John’s leadership style, commitment, and vision, and the passion of his followers have generated rapid success for the company. However, the leadership style employed revolves around one person, who pays great attention to the care of his subordinates but without exploiting their potential to achieve higher performance. John’s thumbprint appears on every aspect of the company and the words of the staff reveal that this is clearly frustrating.

Because of the paternalistic leadership style the structure of the company is not clear. The superior is the owner and all employees are subordinates, which does not allow special roles to be defined. A more formal system of communication and reporting would enhance the performance of the staff, as more attention would be given to the work tasks. The structure of the company should be clearly defined with specific roles and tasks assigned to each employee. These interventions would allow more effective development of strategic tasks needed for the development of the business.

John’s commitment, vision and culture are major strengths for the success of the company. However, those strengths must be harnessed along with the expansion and growth of the company in order to retain good performance levels.

CASE 5.1. TEACHING NOTES

This case is intended for postgraduate entrepreneurship and management teaching courses. The case is narrative-based in order to demonstrate the owner's thoughts and feelings and facilitate deeper understanding of the success and potential failure of a company that relates to the leadership style employed. The major issues revealed during the study of this case are: (a) that turning a business into a profitable and successful enterprise is particularly challenging and (b) the leadership style employed in a business needs to change and evolve as the business grows.

1. Suggested questions and issues raised from the case study

(1) According to the case presented above how would you describe the management style of John Hill? What are the dysfunctional aspects of the leadership he displays?

The management style described in this case involves direct supervision with minimum formal systems and can be seen as a paternalistic leadership style, which is characterised by 'hands-on' involvement of the owner at every level of the company. However, in order to support growth and profitability a 'hands-off' type of leadership needs to be employed. The total control that the owner has, is limiting the opportunities for enhancing staff creativity and innovation. Releasing part of John's shareholding to his managers would distribute responsibilities to trusted colleagues, enhancing delegation, motivation and performance that could result in further growth. In the case of Peter Lane for instance, it is obvious that he has different characteristics yet these are complementary to John's. Lane is the person who can actually implement the goals and vision that are set by John. John's control needs to be more 'strategic' in nature rather than operative in order to encourage his employees to take initiatives and be more creative.

Finally, another dysfunctional aspect is the recruitment of staff which should be based more on their skills rather than beliefs. A varied mix of people with different skills and expertise to counteract John's omni-presence would offer added value to the overall operations performed and could facilitate and complement the everyday activities.

(2) Offer suggestions on how the company's management can be restructured to reduce central control, promote greater flexibility and employee autonomy.

Greiner's growth phase model helps to recognise and understand the important problems that an organisation may encounter because of its rapid growth. The model describes in five growth phases in the evolution of an organisation. These five phases are (Assen, Van den Berg and Pietersma, 2009):

- Phase 1: Growth through creativity;
- Phase 2: Growth through direction;
- Phase 3: Growth through delegation;
- Phase 4: Growth through co-ordination; and
- Phase 5: Growth through collaboration.

Phase 1 focuses on creativity and emphasizes the creation of the products and the market. During this phase the founder is mainly in charge, communication is frequent but informal and good performance is often rewarded by modest salaries (Assen, Van den Berg and Pietersma, 2009).

Phase 2 focuses on giving direction and emphasizes capitalising on the capabilities of a competent and successful business manager. During this phase the organisation's structure becomes more functional. There is

increased focus on: accounting and capital management; incentives to employees; budgets; work standards; increasing the formality of communication; and in hierarchy (Assen, Van den Berg and Pietersma, 2009).

Phase 3 focuses on delegation and emphasizes decentralising the organisational structure. During this phase the operational and market level responsibility is more important. Profit centres and financial incentives are promoted whilst the decision making process is based on periodic reviews. The top management acts by exemption and there is infrequent and formal corporate communication supported with field visits (Assen, Van den Berg and Pietersma, 2009).

Phase 4 focuses on coordination and emphasizes merging the local units into product groups. Formal and thorough planning, while supervising the coordination by corporate staff is important. The supporting functions are centralised and there is scrutiny of capital expenditure and accountability of return on investment at product group level. Finally, motivation through lower level profit sharing is introduced (Assen, Van den Berg and Pietersma, 2009).

Phase 5 focuses on collaboration and emphasizes team action for problem solving, cross-functional task teams, decentralisation of support staff, simplification of control mechanisms, team behaviour training, real time information systems, and team incentives (Assen, Van den Berg and Pietersma, 2009)

According to Greiner's model the company, 'View to Success' can be said to be in Phase 2, 'growth through direction' which is characterised by leadership crisis. This stage implies that as a business grows, the top management is no longer able to oversee all operations (Assen, Van den Berg and Pietersma, 2009). The solution adopted at this stage is to move towards more delegation (Phase 3 in Greiner's model). According to Greiner, delegation evolves from the successful decentralisation of control. Delegating leadership style refers to the extent to which a manager attains the desired objectives by leaving subordinates to make their own decisions' (Oshagbemi and Oholi, 2006, p.756). However, in Phase 3 even routine decisions are still centralised on the top management instead of being left to the lower levels of the hierarchy. This is mainly due to the top management feeling a lack of control.

Phase 3 in Greiner's model requires staff which has clearly-defined responsibilities while the top management acts by exception in specific circumstances. Empirical research indicates that there is a positive relationship between delegating leadership style and idea generation, which is the very first stage of innovation (Bass and Avolio, 1994). The key to effectively manage the operations at this stage is balance, which is essential and must be developed between the top management and the other levels of hierarchy, by applying more effective management and coordination.

(3) Indicate how the strategic orientation of 'View to Success' can be developed to combine strategic control and creativity with delegated or 'hands-off' management.

In View to Success there is an evident misalignment of individual responsibilities. John's vision pervades all aspects of View to Success and does not leave the space and time required for high performance implementation. Linking the visionary characteristics with the implementer's characteristics can introduce higher flexibility and alignment of the strategic goals along with the tasks performed. This link can bring together the characteristics of an envisioner, an enactor and an enabler which are the three key contributions to the growth of an organisation that are relevant to entrepreneurship (Bolton and Thompson, 2004).

The envisioner- entrepreneur has a vision of the future state of the organisation in an uncertain environment (Bolton and Thompson, 2004). John, as source of business ideas and the creator of View to Success's vision can be said to be the envisioner-entrepreneur. John's vision, creative ideas and forceful character were the key factors needed to achieve success.

In order to implement and turn the vision into action the enactor characteristics are also required. The enactor gives the vision direction and purpose while obtaining the required resources (Bolton and Thompson, 2004). It appears that there is no enactor in the View to Success as there is not enough space left for taking initiatives and being creative due to the overall control of the owner.

In order to coordinate the talents of an envisioner and an enactor an enabler's talents are also needed (Bolton and Thompson, 2004). An enabler enables the vision by harnessing the support of other people through coordinating cross-functional teams.

The importance of the key characteristics of the envisioner, the enabler, and the enactor can be clearly demonstrated through another similar and very well known case where the owner of a business left the chief executive position (envisioning) in order to be closer to where the real work was being implemented. This is the case of Bill Gates (former CEO of Microsoft) who several years ago, when his company was in a period of rapid growth, left the CEO's position and gave it to his friend John Allen. He took on the new role of chief software development officer, which was closer to the software development side of his business and exactly at the point where things actually happen. By this action he put himself in a position where he was more involved in implementing the vision.

It is clear that the combination of the different characteristics that offer added value from different strategic angles is vital for ensuring the success and growth of a business. Those characteristics are complementary and contribute to achieving better results, ensuring efficiency and stability of growth.

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Case 5.2. Pulse Student Network Limited: Be there - the rest will happen

By *Paraskevi Gkiourka and Kostas Galanakis*, Nottingham Business School, Nottingham Trent University, United Kingdom.

Abstract. The Pulse Student Network Limited provides customised clothing requirements and event management to students, societies, and sports teams in Nottingham Trent University (NTU). This case study aims to provide insight into the importance of strategic collaborations and how these can boost the growth of a business.

Keywords: *collaborations, growth*

Introduction

Daniel Hill is a young professional who founded, and now manages his business ‘Pulse Student Network Limited’ (Pulse) within The Hive- NTU’s support-centre for enterprise development. Pulse operates from offices within the City campus of NTU and so is able to remain responsive to customer demands, listen closely to customer feedback, and be available on a daily basis to meet with students, societies and sports teams, providing on-site support for all event management and customised clothing requirements.

Daniel, owner and Managing Director of Pulse holds an A graded ‘A level’ in Business and a First Class Honours degree in Business and Strategic Entrepreneurship from Nottingham Business School. In addition he won the 2009 CASQ Award for Best New Business and ICSR acknowledgement as the highest graded student. As Daniel says, the initiative to found Pulse came when he *“spotted an opportunity in the market where there was an absence of product and service.”*

Business overview

Pulse Student Clothing™, a department within Pulse, is now the largest supplier of end-user leisurewear clothing at NTU and within 18 months has achieved a turnover in excess of £95,000. Daniel suggests the secret to the company’s success has been that they *“have researched the market well and are constantly developing new products, ranges and channels to market.”* He is very confident about the viability of the business and he says *“we make to order a huge volume of our products allowing us to offer the largest variety of products around. Manufacturing more than 12,000 items in the first year suggested that a lucrative market exists and we are continuing to explore this.”*

Business evolution

Daniel founded his first business at the age of 15 and has since developed a very strong and motivated work ethic supported by academic and practical knowledge that has brought success to his business. *“I always planned to be self-employed and/or go into business; I have tried working for other people, but I just don’t like it,”* he says.

Daniel financed his business by investing the majority of his £10,000 of savings which he had generated from a number of years self employed work within the construction industry. The business was unprofitable for the first 8 months but he didn’t give up.

One of Daniel’s most significant achievements to date has been to turn his company’s largest competitor into its

largest customer. Pulse now trades internationally on a regular basis and for the future Daniel visualises the 'Pulse' brand as a market leader that is recognised nationally.

"Our customers are knowledgeable about us as a result of the extensive marketing campaigns that we invest in regularly. We have minimised our vulnerability and exposure to competitors by developing exclusive supply relationships with our most valued customers with contracted commitments in place," he says.

Future intentions for development

Pulse Student Clothing™ is currently in talks with three other universities who have recently approached the company. There is great potential for future growth. Supported by Pulse Student Events™, the student events department of the company, Daniel hopes to expand this business to a national level.

The benefit Daniel now recognises from having started his own venture is the freedom and creativity it affords alongside the control and 'reap what you sow' rewards. The concerns Daniel faces include the lack of security involved in business ownership and self employment.

He encountered his first challenges as an entrepreneur within a work placement he undertook at 'Toys 'R' Us', where Daniel was a department manager. During the placement, Daniel seized the opportunity to trial a proactive entrepreneurial approach to management, actively reviewing existing company policy and operational systems in order to find opportunities for change. Numerous opportunities presented themselves and included: an increase in staffing levels for customer service; reconfiguration of product layout, based on new market research; and the re-evaluation of company policy. This approach led to a significant increase in product sales. Within weeks of his initial training, Daniel was offered promotion to assistant store manager- the only student to be offered such a promotion in the company's history. Furthermore, his steadfast dedication to entrepreneurship and his innovative approach to management gained him media recognition for an outstanding contribution to customer service, in addition to an award for 'Multimedia Manager of the Year'. These achievements were also reflected in the department's year ending value of over £2.5 million, over 40% growth on the previous year.

Keys to successful entrepreneurship

According to Daniel, *"the keys to being a successful entrepreneur are commitment, research and paying attention to detail while working hard, and being constantly innovative."* He regrets any moments that he finds himself considering working for someone else and his advice is *"just turn up, the rest will happen."*

The lessons he would like to share from his career are *"do plenty of research, look at the margins and just do it!"* Market research has helped Daniel to create a company that is efficient in its operation and aware of its need to set targets that are sustainable and lucrative. Professionalism and knowing exactly what is going on in the market and more importantly the accounts, has paid off. Moreover, this way *"people take you seriously,"* he says, *"which is often half the battle."* The best thing for Daniel as an entrepreneur is that he enjoys getting up and going to work!

CASE 5.2 TEACHING NOTES

This case study focuses on exploring the importance of collaboration in bringing the right information and clients into the business and setting realistic and sustainable targets. It aims to inform students and professionals of the importance of such collaboration in business development. It can be provided as teaching material and generate discussion in the focus area. Readers should be able to gain more in-depth knowledge of the importance of business collaboration and how these can affect business success.

Question 1: How is collaboration defined?

Collaboration is defined as the act of working together for solving problems; learning, sharing, or just being together for shared benefits (Beyerlein, Beyrlein and Kennedy, 2006). The culture of collaborations relies heavily on cooperation, which can generate a reflective and mutual learning environment among the members of the network.

Question 2: What strategic collaboration benefited Daniel's business?

Daniel Hill's business benefited from the collaboration developed between his company and his largest competitor. Making the competitor its largest client has contributed to the growth and success of the business. This strategic collaboration has acted as a mechanism for stimulating mutual satisfaction as well as improving the competitive advantage of both partners.

Additional Readings

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Case 5.3. Electrical Motors Co.

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Abstract: Electrical Motors Co. was a well established company with more than 30 years of experience in business. Simon Mills, the company's CEO, had done a good job developing a lean organization that was functioning well. However, by June 2005, as he was searching for new growth opportunities he had to face the fact that the company's core industry, electrical motors, was extremely mature and that these opportunities would have to be found elsewhere.

Keywords: *Opportunity identification, evaluation and pursuit, resource assemblage and leverage to exploit an opportunity, business strategies.*

Note: This case study was written for the purpose of stimulating learning and discussion. The authors compiled it in November 2010. The individuals, events and difficulties referred to are real, but have been disguised for reasons of privacy.

Introduction

Electrical Motors Co. (EM Co.) is an established developer and manufacturer of electrical motors that has developed a leading-edge generator for wind turbines. With the rising interest in green energy, EM Co. is positioning itself to participate in the fast growing renewable energy market. The company's permanent magnet direct- and hybrid-drive synchronous generators are more efficient than the current technology available. While the wind energy market is highly competitive and price sensitive, the great challenge is represented by understanding whether or not permanent magnet generators will come to dominate the marketplace over the next five to ten years. The big challenge that this company faces is whether or not it should enter the North American market. This internationalization process could consolidate the company as global business but it could also put its survival at risk.

Company background

EM Co. was founded in 1967 in Italy as a privately owned Italian manufacturer of electrical motors for a wide range of industrial applications. The company's product portfolio has grown over 43 years to include three primary product lines:

- 1) **AC and DC motors used in a variety of applications:** the company produces over 2,200 motors annually, and distributes 85% of these abroad. The AC and DC motor product line has products that range in power from between 0.5kW to 2,500 kW. EM Co. has established a reputation for high quality, reliability and the ability to customize motors to meet specific customer demands.
- 2) **Winches for rope lifts and elevators:** winches are a new product line and are used in elevator and lift applications. They are produced in China by a 43% owned joint venture. This new product line began for elevators carrying between 400kg and 1,200kg. The winches are compact, highly efficient, and virtually maintenance-free.
- 3) **Permanent-magnet direct-drive and hybrid-drive synchronous generators:** the company recently began research and development on PMDD generators for use in wind applications.

Electrical motors are the company’s flagship product line contributing to the majority of its revenue. Financially, EM Co. is strong as it is expected to increase sales from \$22 million to \$26 million. It generates strong EBITDA of approximately \$1.9 million and has access to bank financing of approximately \$4 million. Approximately 3-4% of sales are reinvested in research and development. Today, EM Co. is well positioned to satisfy the demand for AC and DC variable speed technology for most industrial applications through its current product offerings.

Summary of the situation

Simon Mills, Chairman and Managing Director of EM Co. has a technical background having obtained an undergraduate degree in Mechanical Engineering and a Masters degree in Automotive Engineering. In addition, Simon was Chief Engineer for an automotive company for three years. After holding this position he moved into a management role with another company. During his ten years with this venture he progressed quickly to the position of Managing Director for two of its European subsidiaries.

He then started his own company becoming a partner at Mills & Co., a consulting company that specializes in the restructuring of industrial companies. Twelve years later Simon was appointed Chairman and Managing Director of EM Co.

Historically, EM Co.’s organizational structure, like that of many large Italian companies, was based on complex hierarchal relationships and distinct functional departments. With the appointment of Simon as Chairman and Managing Director, EM Co.was reorganized based on the principals of lean production. The current organizational structure of the company consists of five distinct functional operations; Design/Engineering, Production, Logistics, Service and Marketing and Sales. These operations are horizontally integrated to maximize communication flow, collaboration and productivity. Figure 1 below illustrates EM Co.’s current organizational structure.

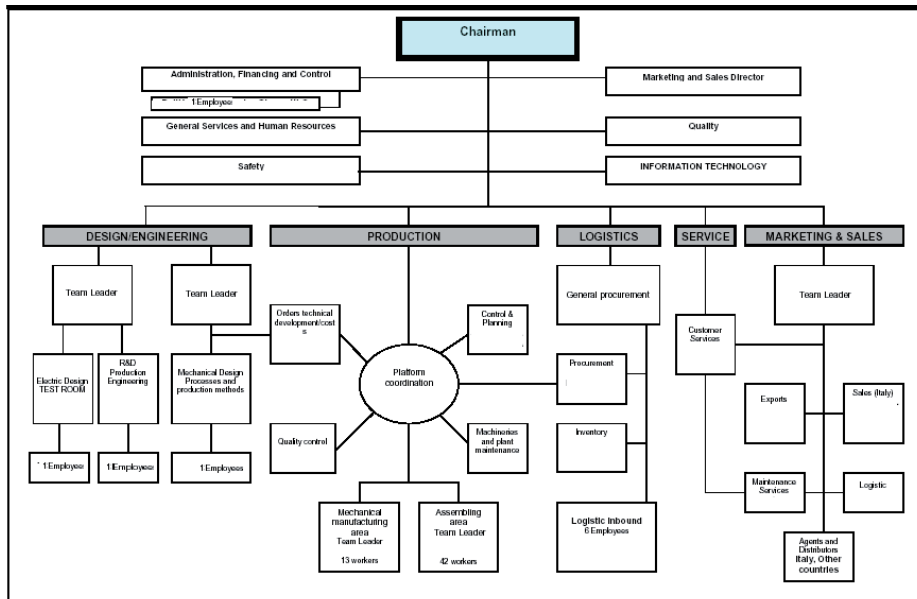


Figure 1. EM Co.’s organizational chart

Through the new organizational structure, the company was able to scale back its operations from 179 to just over 100 employees with over 80% cross-trained in multiple tasks. The company also makes use of a sophisticated enterprise management system to organize and monitor all production activities and maintain control of the entire manufacturing process, including product costing. In addition, the current system allows external customers to check the progress of their orders via a secure website.

Summary of the issues

When Simon was appointed CEO of EM Co., in addition to the reorganization's of the company structure, one of the main challenges he faced was the risk generated by the narrow range of product offerings. EM Co. had a very strong reputation and a good market share in the electrical motors business. However, the market was very mature and competitive.

For this reason Simon searched for commercial opportunities, exploiting the company's know-how that had been developed through many years in the business.

The first opportunity was found in the market for rope lifts and elevators. EM Co. developed a joint venture in China and started commercializing these components a few years after.

To diversify the business further, EM Co. made use of its know-how and its investment in research and development to develop an innovative series of direct and hybrid drive permanent magnet synchronous generators (PMDD) for wind turbine application. PMDD generators are more efficient than the traditional asynchronous induction generators used in modern wind turbines.

Generators are a key component and distinguishing feature of wind turbines. The benefit from using PMDD is a higher return on investment and a shorter payoff period for wind farms. By exploiting the properties of permanent magnets, EM Co.'s generators are able to obtain very high specific powers at performance levels required for megawatt (MW) class turbines that are increasingly dominating the market.

The benefits of this technology include:

- (1) increased efficiency through the elimination of the gearbox;
- (2) lower ongoing maintenance costs due to fewer mechanical parts;
- (3) increased reliability;
- (4) smaller overall turbine design.

Coupled with EM Co.'s unique customer-centric production processes, these product attributes form the basis of the company's value proposition.

The benefits of PMDD generators are generally understood by the industry, despite a lack of tangible data which would allow head-to-head comparison with the standard solution.

The company could manufacture two classes of PMDD generators. Large generators with a power rating of 1.2 and 1.5 MW, and small generators rated at 5-200 kW. The MW class generators are designed for use in large turbines and are typically installed in groups of several hundred in wind farms. The smaller generators are targeted at the small wind market, suitable for residential or off-grid (independent of electrical utility grid) applications.

Simon knew that the company had an excellent technology that delivered a clear value proposition to potential customers. He also knew that if he wanted to position the company as a global player in the wind generator industry he had to enter the U.S. market. However, the information he had on this market left him uncertain as to whether the company could successfully target it without putting its own survival at risk.

Attachment 1: the North American market

The wind energy value chain outlined below is split into two distinct groups by the wind turbine power rating. Large turbines are typically utility grade machines with a rated power capacity of 1MW and greater. Small turbines are classified as less than 200kW. The majority of applications of wind turbines require sizes below 200kW and greater than 1MW. The value chain in the United States is dominated by the large wind turbine manufacturers, with sales exceeding \$3 billion in 2005.

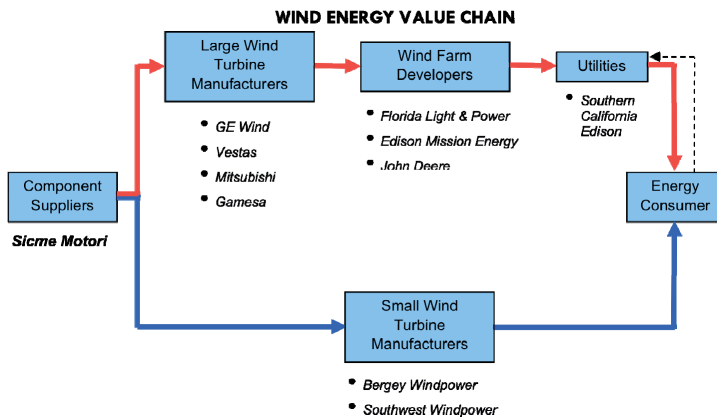


Figure 2. The North American market value chain

Stand-alone component suppliers, such as EM Co., serve the wind turbine manufacturing community. Many of the large turbine manufacturers are multinational companies with years of experience in the heavy industry market. These companies have taken steps to organize vertically to realize economies of scale within their wind energy divisions and to control new product innovation. Wind farm developers purchase turbines for large scale ‘on-grid’ energy production facilities, which are known as wind farms since 50 or more MW class turbines are typically installed in one area. In the current market for wind energy, there are two main types of wind farm developers; independent power companies and large banks that are non-operating investors in wind energy. Although large turbine manufacturers compete for both segments, the needs of each buyer differ. Large power producers are often technically savvy wind farm operators and purchase lower priced machines requiring greater maintenance, whereas non-operating investors will migrate toward higher priced, lower maintenance machines. Wind farm developers sell the energy produced from the farms to public utilities, which then sell the electricity to consumers. It is interesting to note that utilities typically sign 20-year contracts with wind farm developers to provide a constant source of electricity at a pre-negotiated price. Sustained reliability and low cost become the prime metrics with which to differentiate turbines. The terms and conditions of these contracts, considered standard within the industry, have a trickle-down effect within the wind energy value chain.

For the smaller market, individual component suppliers sell to turbine manufacturers, who in turn sell directly to end-users. A large target segment for the small turbine market is rural land owners seeking to reduce grid-connected utility bills by owning a source of electricity on their property. In certain cases, the end consumer is permitted to upload excess energy back to the utility grid. In these instances, a ‘credit’ is issued to the consumer.

Market for turbine generators

The market for wind turbine generators is directly linked to the market for wind energy. As stated in previous sections, this overall market is divided into two classes based on the power rating of the turbines.

Large turbine market segment

The large wind turbine market is composed of multinational companies developing MW class wind turbines for distributed energy applications. In the United States, almost 90% of the installed capacity was contributed by the two market leaders. Neither of these companies were viable customers for a new component supplier primarily due to their in-house production of generators and the inability for EM Co. to meet their large production schedules. The large wind market is exclusively targeted towards wind farm development. Wind turbine manufacturers compete for the multiple utility grade projects in the United States. Turbine costs and reliability are the two most important attributes for turbines. Within the turbine market the adoption of PMDD generators is expected to begin within the next year and increase over the next four years. Market research has indicated that the market adoption of the PMDD is expected to be slow at first as the economics of PMDD based turbines have not been validated with field data.

The growth of the large wind turbine market in the United States has largely been dictated by the availability of federally mandated production tax credit (PTC) for wind energy. Compared with traditional fossil fuel-based sources of energy, the energy produced from wind is not economically competitive. The PTC of \$.019 per kW-h allows wind energy to be a competitive source of energy for large-scale utilities.

The PTC law expires every two years and requires Congressional approval before renewal. Historically, Congress has been late in renewing the credit, thus causing market demand for wind energy to be substantially reduced in anticipation of the impending expiration. Only wind farms that are installed and operational prior to the expiration of the PTC are eligible to receive credit for the life of the project. This rule forces a deadline on the industry, where every company in the value chain must rush to meet demand. With the PTC currently enacted, market demand is high and there is a shortage of raw materials and assembled turbines. The large turbine manufacturers are falling short of fulfilling market demand, which has created opportunities for new turbine manufacturers to sell to wind farm projects. As a result of the boom and bust cycles caused by the PTC, turbine manufacturers encounter substantial challenges in planning for future demand.

While the general feeling in the industry is that the PTC will be renewed by the end of the year, there are no guarantees.

Small turbine market segment

Similar to the large turbine market, supply of small wind turbines is shared between a few leading manufacturers although there are more than 80 companies in the United States. Leading small turbine manufacturers do not outsource generators as they are highly integrated in the overall turbine design, utilizing PMDD technology to build their generators. Generators account for 5-15% of the total cost of a turbine. By applying these percentages to the total value of US small turbine sales (\$25 million), we approximate a total potential generator market of \$1.25– \$3.75 million. However, we further discount this market size by the market share controlled by two leading vertically integrated firms that produce generators in-house. Our final market potential for a generator supplier results in a mere, \$250,000 - \$750,000.

The small wind market does not qualify for the PTC and there is no federal equivalent credit for this market. State incentive programs such as rebates, buy-down programmes, and grants, vary for each state based on local regulations.

Small wind competes with the photovoltaics (PV or solar) industry for access to individual consumers seeking to lower their energy bills. The solar industry, which is approximately 10 times larger in revenue terms than the small wind market and also enjoys consistent Congressional support in the form of financial incentives for purchasers of solar energy products. The small wind industry often receives less attention politically, leading to a further imbalance with competing industries.

Market risks and challenges

The U.S. market for wind energy has grown by 25.2% in the last two years. With the anticipated renewal of the PTC, the momentum should continue in the coming years. However, inherent market risks and emerging trends may impact the market potential for a new component manufacturer. These risks and trends include:

- **Vertical integration among turbine manufacturers.** The top five turbine suppliers to the US market accounted for nearly 98% of the total number of turbines. In recent years, more manufacturers have migrated towards vertical integration in an effort to decrease production costs and manage product innovation.
- **Volatility of the PTC creates challenges.** The cyclical nature of the PTC not only impacts sales in the wind industry, but also negatively impacts overall industry investment.
- **Focus on margins and cost-cutting.** Competition in the wholesale costs of energy has traditionally reduced margins in the wind turbine industry. As a result, until supporting field data validates a shorter ROI from PMDD generators warranting larger up front investments, the near term focus to drive down energy costs will inhibit the adoption of higher cost PMDD generators by turbine manufacturers.
- **Increased production capacity from dominant US incumbents.** Although smaller suppliers are challenged by their inability to invest in the US market, established incumbents have taken steps to expand US production capacity.
- **Labour shortages.** The instability of the PTC has created a shortage of qualified workers in the wind energy industry. Such shortages will create barriers for new market entrants looking to establish manufacturing facilities in the US
- **Alternate energy sources.** Without Federal support in the form of the PTC, wind energy is not yet economically viable in the US

Competition

Although the market for component manufacturers is highly fragmented, a few leading generator manufacturers with well-established brands control the generator component market, similar to the turbine market. Among those suppliers, several factors have intensified competition for new supplier relationships. First, a growing trend towards vertical integration among wind turbine manufacturers has decreased the potential market size for component pure-plays. Second, as competition for turbines increases, integrators place downward pricing pressures on component suppliers. Finally, established long-term supplier agreements, with a small segment of generator OEMs and leading turbine manufacturers, virtually eliminate market opportunities for new entrants.

CASE 5.3. TEACHING NOTES

This case is intended for analysis at undergraduate, possibly final-year degree level. However, with more in-depth treatment of some of the key thematic areas, it would also be possible to use the case effectively at postgraduate level. The case can be used to analyse the critical variables for business internationalization, particularly those concerning the adequacy of the company's resources and the feasibility of different growth strategies.

Essentially discussion and analysis should be focused on the following:

- (A) Opportunities within the large turbine market segment:** The discussion regarding this market's size and growth projections should be based on three different scenarios:
- a. The optimal scenario is that the PTC will be renewed prior to expiration and the market will continue to grow.
 - b. The baseline scenario is that Congress will miss the renewal deadline in 2007, but the credit will be reinstated after one lapse.
 - c. The worst scenario simulates continual lapses in renewing the credit, which would be devastating for the entire industry.

EM Co. finds itself in a unique situation with respect to the US market. Its product offering is superior in many ways to the current induction generator technology. To this extent, while the new permanent magnet direct drive and hybrid drive technology is different from standard induction technology, it is not clear that EM Co. will be able to provide a differentiated product offering once the new technology becomes the de facto standard with large turbine manufacturers. The challenge facing EM Co. is primarily a market penetration issue.

The key aspect that affects the company's opportunities within this market are:

- + Fast growth rate (assuming consistent and predictable renewal of PTC credits) with increasing emphasis on green energy production by Federal and State governments;
 - Considerable market and investment risk with PTC renewal / expiration cycle;
 - Heavy consolidation in the marketplace over the past 20 years with four to five companies controlling almost the entire market;
 - Large, incumbent competitors with significant brand recognition, experience, and financial resources;
 - Reluctance to adopt the new, untested, and more expensive technology given the high existing levels of risk aversion and unfulfilled demand for current induction technology.
- (B) Opportunities within the small turbine market segment:** It would very difficult for EM Co. to compete as a component supplier. The value proposition of PMDD generators for small wind turbines is moot, since the industry already utilizes PMDD technology and has been doing so for many years. Finally, and perhaps most importantly, leading small turbine manufacturers do not outsource generators as they are highly integrated in the overall turbine design. EM Co.'s estimated market potential for the small turbine segment provides further support for the suggestion that there would be limited opportunity for a new component supplier. As discussed above, the total potential market in small turbines is a maximum of only \$750,000.

(C) Overall strategic aspects and internationalization opportunities

While EM Co. is ahead of the research and development curve compared to many large turbine manufacturers and generator manufacturers, they lack the geographic proximity and manufacturing scale

to supply the US market for large generators once adoption takes off. Additionally, many of the global wind turbine and generator manufacturers might develop or have already developed their own permanent magnet direct drive or hybrid drive solutions.

Given the large capital outlay and substantial risk required to start a greenfield operation in the US via wholly owned subsidiaries, the only feasible way to become a player in the US market would be to create a joint venture with an existing American company with experience in manufacturing large scale mechanical devices, preferably with experience with or connections to the wind energy industry.

However, given the significant risks involved in such a venture (identified above), it does not seem advisable for EM Co. to proceed with a joint venture with only modest upside potential.

Case 5.4. NIK-05 Ltd: Development of Managerial Infrastructure in the business model of a pellet producer

Daniel Pavlov, PhD, University of Ruse, Bulgaria

Abstract: Nikola Zmeev – the owner of the NIK-05 Ltd – is a producer of wood for heating, and has a very good understanding of the possible use of biomass as a renewable energy source (RES). Because of his job he spends most of the day in the forest, breathing fresh air, analyzing the consequences of pollution and its impact people’s health. His biggest dream is to give a better opportunity to his two little children to live and work in an environment with adequate respect for nature. He has the full support of his wife on this issue. But can these intentions be converted into business action? This case study presents the issues facing a very small firm in starting up the production of pellets from biomass.

Key words: *business model, pellet-production, vertical integration, financial sources, investments.*

Background of the firm⁶¹

Nikola has been working in the woodcutting sector for over 10 years, most of them as an employee of his father’s firm. In 2005 he established his own firm (NIK-05 Ltd) with a main office in the village of Udelnik in the municipality of Slivo Pole. He also manages NIK-05 Ltd which is in the business of cutting and selling tree trunks and timbers in forms that are suitable for use as heating fuel.

Nikola identified the advantages of supplying intelligent energy in the form of pellets and eco-briquettes made from biomass (plants) during the first year of his firm’s activities. He came to realise that the concept of energy efficiency is based on a transition to renewable energy sources for heating, including pellets and eco-briquettes (Appendix 1). The use of wood for direct heating is contrary to environmental protection and increases the share of RES. For these reasons, in 2007, Nikola took the first steps to develop a new activity for his firm –intelligent energy production in the form of solid fuel (pellets and eco-briquettes). He estimated that this initiative needed the implementation of an innovation, which was beyond his personal capacities. He therefore contacted scientists at Ruse University for support and expertise, especially those from departments of Business and Management and Agricultural Techniques. NIK-05 Ltd uses the Ruse University academics as knowledge suppliers for research and the implementation of research, related to:

- the legal environment which has a direct influence on pelletaneco-briquette production;
- the creation of a business model and a management structure for the production of pellets and eco-briquettes, using a specific technological approach;
- the resources (financial, human, informational and material), that are necessary in pellet and eco-briquette production.

The task for Nikola is to give his knowledge suppliers full access to the documents and assets of NIK-05 Ltd.

⁶¹ Source: **Павлов, Д.**, Висема, Х., Пенчев, В., Димитров, Д. Русенският университет – трета генерация (казусно описание) // Сборник 20+10 казуса: Мениджмънт на промяната (част 3). ISBN 978-954-9972-90-0, 2008, с.с.82-93, 134,135.

Elements of the business model according to Alexander Osterwalder approach

Dr. Daniel Pavlov, the Head of Ruse University Entrepreneurship Centre, has given a variety of advice to Nikola This has focused on developing the new activity– pellet production-, using Alexander Ostwerwalder’s conceptual business model. This consists of 4 pillars, subdivided into 9 elements (Table 1).

Table 1. Business model elements, according to Alexander Osterwalder⁶²

Pillar	Building Block of Business Model	Description
Product	Value Proposition	A Value Proposition is an overall view of a company's bundle of products and services that are of value to the customer.
Customer Interface	Target Customer	The Target Customer is a segment of customers a company wants to offer value to.
	Distribution Channel	A Distribution Channel is a means of getting in touch with the customer.
	Relationship	The Relationship describes the kind of link a company establishes between itself and the customer.
Infrastructure Management	Value Configuration	The Value Configuration describes the arrangement of activities and resources that are necessary to create value for the customer.
	Capability	A capability is the ability to execute a repeatable pattern of actions that is necessary in order to create value for the customer.
	Partnership	A Partnership is a voluntarily initiated cooperative agreement between two or more companies in order to create value for the customer.
Financial Aspects	Cost Structure	The Cost Structure is the representation in money of all the means employed in the business model.
	Revenue Model	The Revenue Model describes the way a company makes money through a variety of revenue flows.

Nikola Zmeev needs to develop the business model of a pellet-producer and he has received help from the Ruse University Entrepreneurship Centre. An important step is to identify the key partners, who may be useful not only in the production process, but also in helping the company to enter a market niche and get proper financing. Looking for an answer to this challenge Dr. Pavlov has developed some options, based on vertical integration⁶³.

⁶² Source: OSTERWALDER, A.. 2004. *The Business Model Ontology - a Proposition in a Design Science Approach*. Dissertation, University of Lausanne, Switzerland. 172p. http://www.hec.unil.ch/aosterwa/PhD/Osterwalder_PhD_BM_Ontology.pdf

⁶³ Source: Павлов, Д. Вертикална интеграция при производството на пелети и био-бриекти. //Списание “Икономика и управление на селското стопанство”, бр.1/2009г, ISSN 0205-3845, с.с.29-34. <http://iuss.eu/2009/01-04-09.pdf>

Biomass capacity of Bulgaria

Renewable energy has three different applications⁶⁴: electricity generation, heating and cooling, and the production of biofuels for transport (Table 2). These three applications represent different technological processes and they take place in different industrial sectors. Of all the types of renewable energy, only biomass is used in all the applications described.

Table 2. Types of renewable energy used⁶⁵

RES \ Energy	Electricity	Heat	Transport Fuel
Biomass	YES	YES	YES
Solar	YES	YES	
Geothermal	YES	YES	
Wind	YES		
Ocean	YES		
Small Hydro	YES		

The basic source for the production of pellets and eco-briquettes is biomass, which is widely produced in rural areas. The Bulgarian crop fields cover over 3 million hectares, which is about 28% of the total territory of the country as is shown in Table 3. The areas that produce wheat, barley, corn and sunflower, amount to about 2.4 million hectares (Table 4).

Table 3 Total cultivated agricultural area in Bulgaria (in hectares)⁶⁶

Year	2007	2006	2005	Average per year
Agricultural areas	3,057,740	3,089,531	3,128,210	3,091,827

Table 4 Area of land for Production of Agricultural Crops in Bulgaria, (in hectares)⁶⁷

Year	2007	2006	2005	Average
Wheat	1,120,510	979,925	1,134,354	1,078,263
Barley	193,840	192,539	276,472	220,950
Corn	408,880	386,772	340,847	378,833
Sunflower	686,692	785,064	653,371	708,376
Total:	2,409,922	2,344,300	2,405,044	2,386,422

The maximum biomass that the fields in Table 4 are able to supply for pellet production is almost 4.8 million tons, as the average production of biomass is around 2 tons per hectare. The energy equivalent of 1 ton of

⁶⁴ Source: DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT. 2007. *Renewables make the difference*. Luxembourg: Office for Official Publications of the European Communities, Belgium, p.5. http://ec.europa.eu/energy/climate_actions/doc/brochure/2008_res_brochure_en.pdf

⁶⁵ Source: DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT. 2007. *Renewables make the difference*. Luxembourg: Office for Official Publications of the European Communities, Belgium, p.5. http://ec.europa.eu/energy/climate_actions/doc/brochure/2008_res_brochure_en.pdf

⁶⁶ Source: BULGARIAN MINISTRY OF AGRICULTURE. 2007. *Agro statistics. Results and Analysis. N 116-2007*, p.28.

⁶⁷ Source: BULGARIAN MINISTRY OF AGRICULTURE. 2007. *Agro statistics. Results and Analysis. N 116-2007*, p.28.

biomass is 18,000-19,500 MJ, or 5- 5.42 MWh. If all biomass could be harvested and processed, the annual energy equivalent would be at least 24 million GWh or some 3000 MWh per hour, which is almost equal to the capacity of the Bulgarian nuclear power plant at Kozlodui, which supplies 42% of the electricity in Bulgaria⁶⁸. These figures describe the most optimistic usage of biomass for energy, but even if a much smaller portion of this is used for energy production, it is still a crucially important source of renewable energy. This means that the rural areas have an important role as biomass suppliers.

It is vital to develop the relationships between the key partners: biomass suppliers (mainly agro firms and wood/timber firms), pellet producers and traders (or large direct customers). Nikola's focus is on developing vertical integration among these partners, which will improve his business model, especially the 'partnership' element.

Forward (up-stream) vertical integration of pellet production

Depending on the source of initiative for the integration, it is possible to outline two main stages: (a) from the biomass supplier to the pellet producer and (b) from pellet producer to pellet trader/key customer.⁶⁹

(a) During the first stage of the forward vertical integration the source of initiative is in the agro firm. It produces crops, especially wheat, barley, corn, and sunflowers and there is a significant amount of waste biomass which is entirely suitable for pellet production. Instead of burning the secondary biomass in the field, the agro firm may supply it to a pellet producer. The agro manager has various options: to sell packaged biomass to a pellet producer; to allow the pellet producer to take the biomass from the field; or to produce its own pellets. We will take a closer look at each of these options:

The agro firm sells packaged biomass to a pellet producer.

The agro firm packs the biomass and delivers it to the working premises of the pellet producer. The costs of gathering, packing, storing and transporting the biomass are paid by the agro firm. This variant is suitable for the agro firm in the case where the pellet producer has requested a quantity of biomass that covers its fixed and variable costs. An advantage for the agro firm is that it can store the biomass and then, according to the market price of the secondary biomass, offer it to the pellet producer. However, to establish a long-term relationship with the pellet producer the agro manager needs to sign a contract that has a price control mechanism. The two business entities may also exchange shares making each of them a shareholder of the other and thus confirming their long-term relationship.

The price will also depend on the cost of storage and transport. Storing biomass brings risks, such as fire, which may cause enormous losses. These risk management issues require extra expenditure. According to a Ruse University study⁷⁰ the distance between the fields and pellet working premises should be less than 50 km if the transaction is to be economically viable. Longer distances cause very high transport costs and lead to unattractive economic results. If the pellet producer takes care of the transportation of the packaged biomass from the agro firm store to the pellet producer's working premises, then the agro firm would receive a price offer for delivery at the storehouse.

⁶⁸ Source: EUROPEAN COMMISSION. 2008. *Bulgaria –Facts about Renewable Energy Sources*. http://ec.europa.eu/energy/climate_actions/doc/factsheets/2008_res_sheet_bulgaria_bg.pdf, p.2.

⁶⁹ Source: Павлов, Д. Вертикална интеграция при производството на пелети и био-брикети. //Списание "Икономика и управление на селското стопанство", бр.1/2009г, ISSN 0205-3845, с.с.29-34. <http://iuss.eu/2009/01-04-09.pdf>

⁷⁰ RUSE UNIVERSITY. 2008. *Biomass Use - Energy Efficient and Environment Friendly Solution*. Ruse University Application to EEA Financial Mechanism.

The pellet producer takes the biomass from the agro-firm's fields.

If the agro firm is not able to make attractive profits from delivering the packaged secondary biomass to the producer, it is better to allow the pellet producer(s) to take the biomass directly from the crop fields. In this case, all expenses for gathering, packing, transporting and storing the biomass are paid by the pellet producer.

Bulgarian legislation restricts the burning of biomass in the crop fields. The agro firm therefore has to find ways of disposing of the waste biomass. The pellet producer 'cleans' the fields making them suitable for the next cycle of agricultural activities.

In some cases, it is possible for the pellet manager to pay only a limited amount of money. The opposite case is also possible, with the agro manager paying for the 'cleaning' of his fields. Finding a solution is a matter of negotiation. Even in the case where no party pays the other, both parties benefit: the fields of the agro firm are cleaned without expense and the pellet producer has free of charge access to secondary biomass. In searching for long-term collaboration they may sign a contract or exchange shares and become shareholders.

The agro manager could initiate such a partnership with a pellet producer if the latter has the necessary equipment for packing and transportation, as well as a storehouse with sufficient capacity.

The agro firm establishes its own pellet production facilities.

In this case, the agro firm develops a subdivision or a daughter company, which produces pellets using its own biomass. If it is a daughter company, then it could be a strategic unit that is expected to generate profit. The new unit of the agro firm is expected to sell the pellets to clients, but it is also rather attractive for the agro firm to use these pellets for heating its own premises and thus be more energy independent.

The agro firm may take this decision if there is enough entrepreneurial capacity in the management body and access to capital, extra labour, expertise, infrastructural facilities, etc. The agro firm could get financial support from public funds. One of these is the Bulgarian National Programme for Development of Rural Areas (measure 311). This programme supports renewable energy production under 1 MWh, which is the equivalent of a production line capacity of 150-200 kg pellets per hour. The maximum of the eligible support is €1 million and the programme covers up to 70% of the investment⁷¹.

(b) In the second stage of the forward vertical integration the initiative is with the pellet producing company, to make contact with either wholesalers of pellets or direct large customers. In addition, it may also establish its own pellet shop for households and other small clients:

The pellet producer develops business relations with whole traders of pellets.

It is up to the pellet producer to offer either a long-term or a short-term relationship. The price of the pellets could be the key factor for taking this decision, but the terms of payment, the security of delivery, etc. may also be involved. If the trader pays on delivery, the price could be low. If the trader pays after selling the pellets, then the price may be expected to be higher. It is also possible for the trader to pay for the pellets even before their production, but would only apply when the market prices of pellets are very high and the pellet producer offers cheaper access to its products.

The pellet producers may offer shares to the trader. If the trader buys them, it is a kind of confirmation for the pellet producer that the trader will sell its pellets instead of looking for other pellet producers. In this case, the pellet producer should be prepared to deal with shareholders and share its profits with them proportionally.

⁷¹ About measure 311 see also: Bulgarian Ministry of Agriculture and Food. *Bulgarian Decree 29 / 11 Aug 2008*. Bulgarian State Paper 76/29 Aug 2008.

The pellet producer develops business relations with direct large customers.

A variety of buildings can be heated with pellets: storehouses, agricultural farms, working premises, schools, hospitals, transport stations, administrative halls, shopping centres, sport facilities, etc. Many of them are also in rural areas. The pellet producer may contact their managers and offer them a long-term contract delivering pellets at a negotiable price. If these buildings are without pellet ovens/stoves, then the pellet producer could suggest that the existing heating system is replaced with a system based on pellets, provided this is technically possible and economically effective and efficient.

The pellet producer may offer its own shares to the large customer too and get a kind of security that this client will buy its pellets instead of looking for other producers. It is important for the pellet producer to know how to deal with shareholders. The large customer will have direct control, not only of the pellet price, but also of all levels of management of the firm according to the size of their shares. The pellet producer may lose its independence and become a daughter company of the large customer. The producer should carefully choose whom to offer shares, how many shares to sell, and the share price.

The pellet producer establishes its own commercial shop

The pellet producer may plan to develop its own commercial chain for pellet delivery to households and other small clients. The location of the shop, all logistic issues and profit forecasts must all be carefully considered. There could be an advantage if the shop offers pellets as well as ovens, stoves, and pellet-related accessories. In this case it would be a 'one-stop-shop'.

The technology of the production of eco-briquettes is the same as pellet production; the stove is the same as for wood-heating. The pellet producer may use this advantage and offer both eco-briquettes and stoves, attracting the clients that have been using wood for heating. Many of these clients are in the rural areas.

The pellet producer is expected to be aware that pellet ovens are relatively expensive in Bulgaria. In the autumn of 2008 they are available in Ruse city market at a price of €3000, which is about the annual average salary in Bulgaria. Another challenge is the market price of the pellets, which is about €150 per tonne. The cost of buying the necessary amount of pellets for use during the cold months (about 4 tonnes) is in fact 20% of the average annual salary. Therefore, it will be some time before pellets become a viable heating product for most households.

5. Backward (down-stream) vertical integration of pellet production

Depending on the source of the initiative, it is possible to outline two main stages again: (a) from the pellet trader/large customer to the pellet producer and (b) from the pellet producer to the biomass supplier.⁷²

(a) During the first stage of the backward vertical integration the initiative is with the pellet trader/large customer, because of market reasons (for the trader) or willingness to replace the existing conventional heating system with a pellet system. They contract a pellet producer for the long term, giving the necessary agreements that they will buy its products as stated in the contract.

If there is no pellet producer available, then the trader or the large customer may initiate the establishment of a company for pellet production. This could be established as a daughter company or a subdivision of their existing company. It is also important to contract biomass suppliers, and offer a joint venture with an agro firm sharing the following responsibilities:

⁷² Source: Павлов, Д. Вертикална интеграция при производството на пелети и био-бриекти. //Списание "Икономика и управление на селското стопанство", бр.1/2009г, ISSN 0205-3845, с.с.29-34. <http://iuss.eu/2009/01-04-09.pdf>

- the agro firm supplies secondary biomass;
- the joint venture produces pellets;
- the trader (or large customer) buys and sells pellets

This case is attractive for traders and direct customers, which operate in areas with scarce biomass but high prices for conventional energy. It is possible to import the pellets from other regions or states or to establish a daughter company. This is the case for one small pellet producer in the Ruse region, which is a daughter company of an Italian firm. The entire pellet production of this company is exported to Italy.

Large customers have to develop a pellet heating systems in their buildings and in parallel, search for a pellet producer and develop long term collaboration. The Ruse Municipality administration intends to replace some of its existing conventional heating ovens with pellet ovens in selected kindergartens and schools.

(b) During the second stage of backward vertical integration (from the pellet producer to the biomass supplier) the initiative is with the pellet producer. The manager contracts an agro firm for long-term usage of the secondary biomass. There are three alternatives here: the pellet producer can buy the packaged biomass, pack and transport the biomass, or produce the biomass itself.

Pellet producer buys the packed secondary biomass

In this case, the pellet producer initiates commercial relations with the agro firm. It is a matter of negotiation to fix the price and financial mechanism for its updating. The cost of transporting the biomass from the agro firm to the pellet producer could be borne by one of them. Depending on the place of delivery, the secondary biomass price will vary. The price will be lower if the pellet producer takes the packaged biomass from the agro firm stores, and higher if the agro firm delivers it to the pellet producer's factory.

There could be some exchange of shares. The pellet producer may offer to buy some shares in the agro firm. This could be applied in the case where the agro firm faces financial problems. By allowing the pellet producer to buy some of its shares, the agro firm not only receives money, but also a market for its secondary biomass.

The pellet producer may offer the opposite arrangement and invite the agro firm to buy some of its shares. In this case, the pellet producer allows the agro firm to have some control of its activity (according to the size of the shareholding) in order to be sure that the pellet producer will buy mainly its biomass, not that of competitors.

In both cases described, the agro firm and pellet producer have to be prepared to deal with shareholders; otherwise a long term contract could be an acceptable alternative.

The pellet producer packs and transports the biomass.

It is necessary for the pellet producer to own or to have adequate access not only to agricultural vehicles for packing the secondary biomass, but also facilities for storage of the packaged biomass. The pellet producer is able to optimise the costs related to packing and transporting. It is a matter of negotiation whether that will be free of charge or whether the pellet producer will pay a certain price for having access to the agro firm's fields. The pellet producer may offer to sell some shares to the agro firm or, alternatively, to buy some its shares. The one in greater need will allow the other one to buy some shares and become a shareholder.

An important factor in their business relations is the moisture of the biomass, which depends on the weather conditions and the length of time the secondary biomass has been in the fields. If the moisture is low, then the cost of drying it (in the pellet production process) is lower. This keeps down the total expense significantly as the drying costs make up about 40-50% of the total electricity costs of pellet production. Using

biomass for heating instead of electricity can also help to keep drying costs down. Dry secondary biomass is a precondition for optimizing the cost of pellet production.

Pellet producer produces the biomass

In case all the other variants fail because of economic, technical or other reasons, the pellet producer has to develop its own production unit for biomass. This agro unit could be a subdivision of the pellet producer or a daughter company. The new unit has to have access to land by owning or renting it.

In this case, the pellet producer is independent in its choice of biomass suppliers and is able to control the price of the biomass. From an organisational point of view, there are some new expenses that the parent company has to bear, in comparison with the other cases:

- Expenses related to the agro machines and agro stores – purchasing, maintenance, renting, etc;
- Higher transport costs if the fields are far from the working premises of the pellet producer;
- The threat of paying higher rent to the landowners, if other appropriate fields are not available and dealing with landowners;
- A variety of other issues concerning the management of a unit, which is new for the pellet producer; the manager needs time to learn the appropriate, economically effective solutions and these ‘lessons’ come at a price..

Financial issues⁷³

In 2009, Nikola Zmeev considered purchasing one of two possible pelletizing machines: the MGL-200, produced in the Czech Republic and the BM-130, produced by Andromeda Ltd, in Ruse, Bulgaria. The price of the MGL-200 pelletizer was half that of the BM-130, while there was no big difference in output capacity; 100 kg/hour for wood pellets and 150 kg/hour for pellets produced from straw or agricultural crops.

According to the preinvestment analysis the total initial costs (for the MGL-200) are €63,000, (VAT included). This breaks down as follows:

- €30,500 for a production line which consists on a thin breaker, a dryer and a pelletizing press machine;
- €15,000 for construction (or purchase) of working premises with proper rooms and workshops in the village of Udelnik,;
- €15,500 for machines that gather and break down the biomass in the forest (a rough breaker, a tractor and one axis trailer);
- €2,000 for administrative and management activities, fees and taxes.

The minimum labour requirement is: one worker for the pellet production line and one or two workers for gathering and breaking the biomass in the forest.

The sum of €63,000 exceeds the current annual turnover of NIK-05 Ltd and banks have refused to provide the firm with credit. There are two opportunities for Nikola to attract extra financial sources:

- partners (but some of them have refused to participate in this initiative due to the difficult circumstances of the financial crisis);
- public funds for small firms support. (a good example is the Bulgarian Rural Areas Development Program 2007-2013, measure 312 “Support in creation and development of small firms”.)

⁷³ Source: PAVLOV, D. 2009. *Financial Limits to Small Starters in Pellet Production – the Case of NIK-05 Ltd*. Финансови ограничения пред стартиращи микропредприятия за производство на пелети (по примера на НИК-05 ЕООД) . *Web Journal in Entrepreneurship and Innovation*, № 1. <http://fbm.uni-ruse.bg/jei/Issue-9-2009/16.pdf>, ISSN 1314-0175, pp176-183.

NIK-05 Ltd is eligible for Measure 312 of the Bulgarian Rural Areas Development Program and is able to apply. According to the financial requirements the firm has to make all payments in advance and then receive a grant for up to 70% of the eligible costs. Nikola can do it only if he has access to a bank loan to cover the initial costs. He has a positive reputation at one of the banks and they agree to credit the firm, but the bank puts a co-financing system as a requirement. This new issue forces Nikola into reconsidering the material assets which he planned to attract for pellet production. He develops an alternative (Variant 2) financial plan where the initial costs are reduced to €20 000 (VAT included):

- €18 000 for a rough breaker, a thin breaker and a pelletizing press machine – all of them new;
- €2 000 for administrative and management activities, fees and taxes;

He plans to use a second-hand tractor and trailer, both given for free by partners (mainly relatives); the working premises are to be rented; the biomass will be dried naturally (instead of with a dryer machine) in the fields during the summer harvest.

Measure 312 requires the beneficiary to use the mobile assets within the territory of the rural municipality. Therefore NIK-05 is eligible to use the rough breaker only in forests within the territory of Slivo Pole Municipality. This obstacle predetermines the maximum transport expenses (up to 15 kilometers). There is no restriction in Measure 312 regarding the territorial origin of the biomass (straw and wood).

Annual expenses forecast in pellets production for ‘Variant 2’

The variable costs are €75 per ton of pellets and they include:

- labour and transport expenses for gathering, breaking and transporting the wood biomass from the forests to the plant in the village of Udelnik or buying and delivering of 1 ton of straw bales;
- electricity and labour in the pelletizing workshop .

The annual fixed costs are expected to be € 5,660 and they include:

- rent of work premises;
- machine service and maintenance;
- administrative and management costs;
- expenses related to bank interest and other annual bank fees (not including the credit capital itself).

At a sale price of €125 per ton (the price is EXW, VAT not included), Mr. Zmeev should develop a sales plan for the pellets. The income is expected to cover the annual variable costs and the annual fixed costs, as well as the return of the credit capital for a period of 5 years (the period of return of the bank loan is set by the bank at 60 months). Using formula (1) it is possible to calculate the break-even point for the annual sales. The total annual fixed costs are calculated by formula (2).

$$X = TFC / (P - V), \quad (1)$$

where:

X is break-even point,

TFC is total fixed costs,

P is unit sale price,

V is unit variable cost.

$$TFC = IC/PBP + FC, \quad (2)$$

where:

IC is initial costs,

PBP is pay back period of the investments (in our case it is equal to the period of return of the loan),
FC is fixed costs.

A combination of formula (2) and formula (1) gives formula (3), which allows us to calculate the break-even point (*X*) for one year within the period of return of the bank loan (60 months):

$$X = (IC/PBP + FC) / (P - V) \quad (3)$$

We replace formula (3) with data about NIK-05 Ltd and calculate:

$$X = 193,2 \text{ tonnes} = (20000/5 + 5660)/(125 - 75).$$

If the annual sales of pellets are over 198.4 tons then NIK-05 Ltd is capable of covering all expenses and to return the bank loan within a period of 60 months. If NIK-05 Ltd successfully benefits from measure 312 to the amount of €10,500, then minimal annual sales of pellets are: $X_{312} = 139,76 \text{ tonnes} = (9500/5 + 5088)/(125 - 75)$.

The output capacities of the 1 production line are determined by the pelletizing press (MGL-200) and they are 0.1 tonne/hour when using wood and 0.15 tonne/hour in the case of straw. If it works 24 hours per day and 356 days per year (8760 hours), then the annual maximum output is 876 tonnes of wood pellets or 1314 tonnes of straw pellets. In fact NIK-05 Ltd plans for the production line to work 80 hours per week for 52 weeks. In this case the annual production would be 416 tonnes of wood pellets or 624 tonnes of straw pellets.

The technology has the capacity to produce pellets far beyond the break-even point ($X=193.2$ tonnes). The priority for NIK-05 Ltd should be searching for major clients for pellets and making contracts with them. The company should also explore the development of direct sales to households.

Conclusion

The major issues and problems of NIK-05 are related to searching for appropriate partners in order to develop proper markets and attract proper financing. It has been easier for Nikola in the past, because the firm dealt directly with small clients and he managed to develop a positive reputation while working in his father's firm. But now he faces an entirely different market with a different type of client.

The major milestone for his pellet project is to sign a contract with strong partners (clients) which will enable him to buy the technology he needs to start producing this renewable energy fuel.

Therefore his key areas of interests are; firstly, to show them his level of loyalty by integrating them into his activity and being transparent; secondly, to ensure that the pellets he is going to produce are high quality and to constantly monitor the production costs and improve the whole management of his firm with the help of Ruse University Entrepreneurship Center; third, once he has some clients, to enlarge his target group, searching for markets outside the Ruse region, or even outside Bulgaria. (Bucharest, the capital of Romania, is only 70 km from Ruse.)

The specific problems faced by Nikola are related to changing the way his firm is organized. Until now he has been the sole owner of the firm and he has dealt with small clients, which is the pure market economics of Adam Smith. But he has become aware that the future belongs to business networks and clusters. He has to make a decision on how to develop such a network and his optimism is based on the variety of collaborations he has established with scientists at Ruse University.

Assignment questions (Questions for discussion)

- A) Why is it important to increase the usage of renewable energy sources? What are the advantages of pellets for heating?
- B) What cooperation has Nikola Zmееv managed to develop with Ruse University?
- C) What are the elements of the business model, according to Alexander Osterwalder?
- D) What are the advantages of vertical integration?
- E) How do the financial restrictions stimulate Nikola Zmееv to opt for vertical integration, rather than developing the pellet-production entirely on his own?
- F) How could he develop vertical integration of his company with the other key partners?
- G) Develop a business model of the pellet-production activity of NIK-05 giving a short description for each of the 9 elements.

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Appendix 1. Pellets and eco-briquettes for heating



Figure 1 Pellets for heating



Figure 2 Eco-briquettes for heating

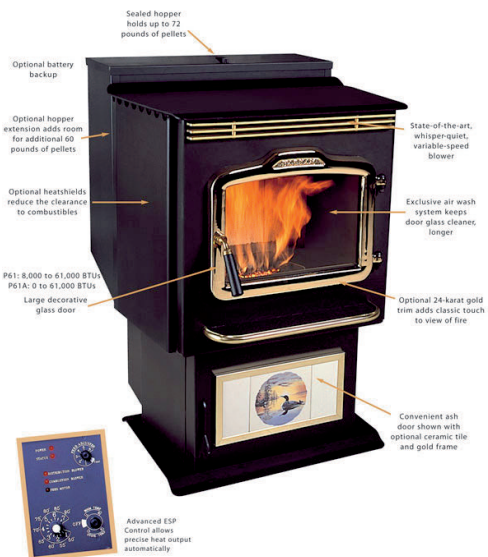


Figure 3 Pellet stove

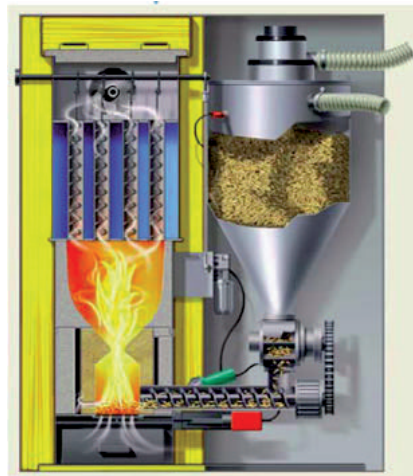


Figure 4 Principle of burning pellets

CASE 5.4. TEACHING NOTES

1. Overview (Summary)

The difficulties facing this pellet producer are mainly financial. Their fundamental problem is the lack of financial resources, which would allow the firm to buy the necessary equipment. The initially planned investments (Variant 1) exceed the annual turnover of NIK-05 by several times, while Variant 2 is more easily implemented. The current global crisis is having a negative influence on the credit regime and policy of the country. The only way for Nikola Zmееv to get over the financial restrictions is to develop vertical integration with good partners.

There are some propositions for this firm which could help it to mitigate the consequences of the financial restrictions:

- to attract partners (mainly relatives) who could provide the firm with second-hand vehicles;
- to attract public funds as a beneficiary of Measure 312 of the Rural Areas Development Programme 2007-2013.

The limited financial resources make it difficult for a small firm like NIK-05 to develop its own marketing and sales planning department. Therefore the manager of this firm has taken a variety of courses at Ruse University, related to marketing and other issues (mainly in the Entrepreneurship Centre at the University). This has served to strengthen the 'business-university' collaboration

The main goal of this article is to help students to get a better understanding of the obstacles which a small firm faces, when trying to enlarge its activity. A solution is to develop collaboration with other firms, research organizations and institutions. An indirect goal is to help students become aware that the usage of renewable energy sources should be increased, because of the finite nature fossil fuel supplies.

2. Teaching/Training Objectives

Students should:

- be stimulated to develop their creativity and knowledge of small firm obstacles and the advantages of biomass as a renewable energy source;
- develop discussion skills while working out a proposal (of about 200 words) for the vertical integration of NIK-05 Ltd for presentation to the owner of the firm;
- develop a business model for the pellet-production activity of this firm and support it with written arguments (up to 200 words); this will help them appreciate the business model as a theoretical instrument and its implementation in practice.

3. Intended courses and target audience(s):

- Students who intend to start their own business and need to develop partnerships with firms, researchers and institutions. This case study could be used on a variety of courses which aim to develop entrepreneurial skills.
- Managers and employees with initiative, who are seeking a new activity for their firms (production and selling pellets for heating) and need a better understanding of the business model of this activity.

- Firms and households, who plan to use pellets for their own heating needs and are searching for opportunities to get them at acceptable prices by developing vertical integration with pellet-producers.

4. Suggested training techniques (Teaching methods)

The case materials are given in advance to the students as a reading assignment. Students can be asked to search the internet in order to get a general idea about the benefits of using pellets for heating.

In the classroom the lecturer can go through the following steps:

1. Give a general presentation of pellets, to ensure that everybody knows about this type of fuel;
2. Outline the capacity of NIK-05 and show that the best strategy for the development of this firm is to establish partnerships;
3. Discuss different scenarios for vertical integration and the advantages/disadvantages of each;
4. Tell the students to work out a proposal for vertical integration of NIK-05 Ltd (this could be done as an out-of-class assignment);
5. Allow the students to present their proposals for vertical integration;
6. Preparation of a business model of pellet-production, suitable for NIK-05 (this could be done as an out-of-class assignment);
7. Allow students to present their proposals for a business model of pellet-production.

5. Questions (Topics) for discussion

- A) *Why is important to increase the usage of renewable energy sources? What are the advantages of pellets for heating?* The main outcome of this discussion should be raised awareness among the students that the switch to renewable energy sources is inevitable. Every firm and every household should start to adopt renewable energy (like pellets) as soon as possible.
- B) *What cooperation has Nikola Zmееv managed to develop with Ruse University?* The main idea is to show that Mr.Zmееv is willing to collaborate and he is open for innovations.
- C) *What are the elements of the business model, according to Alexander Osterwalder?* The main idea is to stimulate students to get a good understanding of the business model.
- D) *What are the advantages of vertical integration?* Students should read each variant carefully and consider the advantages and disadvantages of each of them. Only then will the discussion be useful.
- E) *How do the financial restrictions stimulate Mr. Zmееv to develop vertical integration, instead of developing the pellet-production entirely on his own?* The lack of financial resources stimulates Zmееv to be open for partnership. Is it possible for him to use some technological innovations and to refuse the partnership, based on vertical integration? Yes, it is possible.
- F) *How could Mr. Zmееv develop the vertical integration of NIK-05 with the other key partners?* While in the previous questions for discussion students are expected to acquire information, now they are expected to make and take decisions. In this way they will learn to be responsible for what they propose. The written proposal (200 words) could be developed in teams of 2-4 people, or individually. When it is a group effort, they learn how to discuss the issues; when it is individual work, they learn to take a personal responsibility for what they propose.

G) *Develop a business model of the pellet-production activity of NIK-05 giving a short description to each of the nine elements.* This could be done through a combination of individual and team work. First a team of students may develop the table, giving a short presentation of each of the elements of the business model. This can be followed by individual work, when every student writes an explanation (up to 200 words) of the business model. This allows students to gain extra skills in discussing, proposal writing and taking responsibility.

6. Assessment criteria:

Students could be assessed by the following criteria:

Preparation for the course (20%). The lecturer would ask the students questions A,B,C, D and E and thus will understand how carefully students have read the case in advance as a reading assignment.

Developing a written proposal for vertical integration of NIK-05 (40%). This is their answer to question F. The proposal should be logical. Thus the lecturer could also indirectly assess the usefulness of the student discussions.

Developing a written business model of pellet-production (40%). This should consist of a table (1 page) and an explanation (up to 200 words). This is their answer to question G. The model should be logical. Thus the lecturer could also indirectly assess the usefulness of the student discussions.

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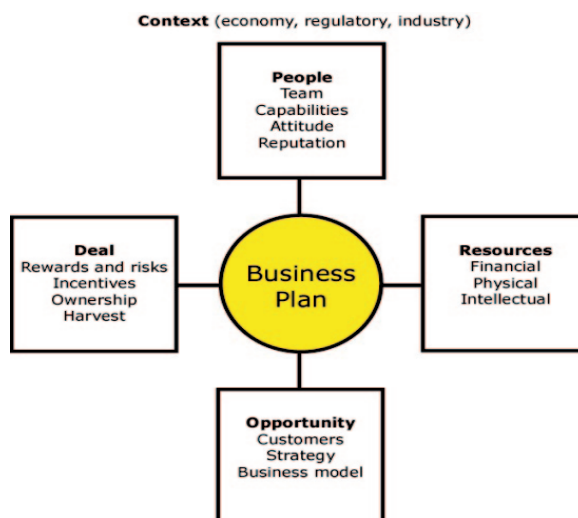
Case 5.5. The development of a winning business model: The case of ihavemoved.com

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Milena Marinova, University of Cyprus

Abstract. This case study highlights the successful launch of a service company that has established a dominant online business model – offering support services to anyone dealing with a change of address. The development of this new economy business venture illustrates what an entrepreneurial idea can achieve, when supported by technology and a dedicated team. Operational since November 1999, ihavemoved.com has established itself as the dominant player in the movers market, having capitalised on a first-mover advantage. In the early days the company was backed up by a consortium of investors led by Rothschild, including Hyundai, Internet Indirect and Nicholas Negroponte. Following UK success, ihavemoved.com has grown from 4 to 21 employees and as a growing enterprise embarked on new horizons beyond national frontiers. The revenue model was originally based on advertising, commissions and database-related sales, but recent strategic development has led to integration of synergies in the business success formula.

Introduction

This case study illustrates practically the key dimensions of the entrepreneurial process driving business success at the early stage of the business life cycle –the creation of a new business. According to the alignment model of William Sahlman of Harvard Business School, there are four dimensions that need balancing, namely: idea, resources, team and exit. This is illustrated schematically in the following figure;



Source: Sahlman, W. 1999. 'The Entrepreneurial proces' In W. Sahlman,

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The idea

Moving home is the second most stressful life event and it takes the average person 2-3 days to notify about 20 organisations of their move. The objective of ihavemoved.com is simply a solution to this painful experience: to enable individuals and companies to change address quickly, easily and conveniently. This is achieved by being omnipresent. Whenever someone contemplates moving home, they will come across the ihavemoved.com concept.

The service can be embedded in the website of partners such as: service providers through the ASP (application service provider or also called 'white label' program), local council administrations, all major real estate portals and other stakeholders. Alternatively the service support can be offline, as a co-branded offering through conveyancers, solicitors, traditional real estate agencies and property publications.

The solution

The benefits for users are multifold:

- free service
- entry of details / contact once for all purposes
- no waiting in queues
- no visiting various sites
- no mailing letters

The venture, branded as ihavemoved.com, was incorporated in July 1999, and an operational website went live in November of the same year. In March 2000, the company raised £2.5m at a post-money valuation of £10m from a consortium of investors led by Rothschild, including Hyundai, Internet Indirect and Nicholas Negroponte.

Technology platform and market niche

To operationalize the business into the ihavemoved.com service, a dedicated team of 8 people developed, entirely in-house, the technological platform. In the early stage the residential site was averaging 1,600 registrations per month. This translated into 370 users, changing an average of 900 addresses. With the implementation of the 'white label' site, based on an XML platform, traffic has grown at 27% over the previous month (recording 323% annualized growth). Revenue from the sale of 5 'white label' engines has generated £47,500, along with just under £1,000 in change of address revenue and £5,000 from advertising and sponsorship.

The economics of the business model

Partner service providers were charged £1.00 per change of address notification supplied. Moreover, commissions were levied on new customers sourced and on upsells. This levy ranged from £5 to £90 depending on the service provider and the product /service sold. White label versions of the site provided to partners were charged at £15,000 initially and then a maintenance fee of £250 per month was imposed. Finally, aggregate data

was also sold to organizations with a view to engineering targeted marketing–sales campaign to reach out to movers.

Whilst ihavemoved.com was making a high gross margin revenue stream from notifications and commissions, the real value of the company was in the information gathered. The company was becoming the comprehensive point of access for home and office movers. Knowing what school, university, clubs, airlines, retailers, publications, cards, banks and insurers a person is associated with as well as full address details, is a depth of knowledge not available elsewhere, especially at the pivotal point of moving.

Partnering strategies

Having established strong awareness among service providers and the target customer demographic, ihavemoved.com was transferring address change technology to partners to enable them to deliver their own products and services. This allows partners to design and create an address change service of their own that looks and feels consistent with their own website and branding, whilst being entirely delivered by ihavemoved.com. The technology is based on a templating system that enables partners to edit the white label platform to reflect their own dynamics, in line with their branding. This software is known as ‘ihavemoved in a box’, with partners receiving a manual and instructions for use. An example of this product is the British Gas white label:

www.gas.co.uk/homemovers/ihavemoved.html

This is proving very popular, particularly with utilities, and has now been implemented by PowerGen, Thames Water, Freeserve, Asserthome, Argos, British Gas and BT. By adopting this strategy, ihavemoved.com is able to enforce exclusive agreements with these companies, generate targeted traffic without spraying advertising spend, and engender trust by being embedded in the website of a very well known brand name. It also entrenches the company against potential competition and enables the site to offer confirmation of processed address changes.

The company also participated in a government pilot to bring an online address changing solution for government organisations. Offline customer acquisition is also being implemented through co-branded forms distributed via traditional estate agencies, conveyancers and an insert campaign.

Market Development

These stratagems are now being applied to the German and the commercial moving markets. With the team of highly qualified and driven people in Germany (currently 3 employees in Hamburg) and technological support from the UK, ihavemoved.com is expanding internationally. With a 25% higher propensity to relocate and a larger online population than the UK, the German operation is set to contribute significantly to the revenue of ihavemoved.com. In partnership with Dun and Bradstreet, the commercial offer is attracting considerable interest from other service providers.

The business model

The business model upon which the success of ihavemoved.com is based has four components:

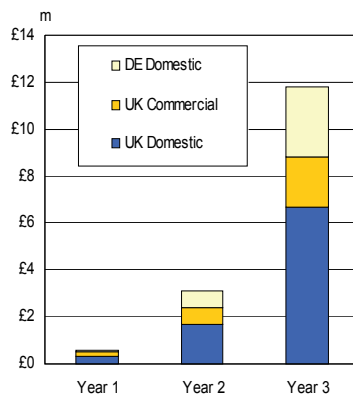
(a) **An innovative technological idea** which was developed in-house, and penetrates major UK utilities and service providers;

(b) **Data-gathering** which enables the company to instantly collect important demographics and preferences from users, which provides insightful knowledge into buying patterns. Consumer trends and patterns can be tracked and analysed in real time, based on valuable market information. This data is then made available to partners through their secure extranets. The many ways in which the unique combination of information held by ihavemoved.com can be used to create useful business ‘products’ is without a doubt one of the most exciting avenues through which the company can expand its range of services. The company passes only relevant information to companies and never sells user details. It fully complies with Data Protection and has been awarded the ‘TRUSTe trust-mark’.

(c) **The profitability of this service** based on the low cost structure of the venture, the revenue model via commissions and advertising, the scope for selling the ‘white label’ and the prospects of transferring the solutions to other geographic markets in continental Europe.

d) **An experienced and successful management team capable of commercialising the technological idea** - the foresight and ability of the management to repeatedly find innovative ways of multiple implementation of their idea has resulted in strong branding, exclusive contracts with major utilities and strong relationships with major address aggregators relevant to businesses, including the government.

e) **The building of relationships with multiple partners** that leverage the venture. Partnering with leading utilities not only helped with sustainable cash flows but also enabled the founding entrepreneurs to marshal growth capital. **Financing the growth strategy**



In the light of the large growth opportunity during the dot.com euphoria the ihavemoved.com team sought £6 million for its 2nd round of financing. This was to follow the 1st round of £2.5m at a post-money valuation of £10m which was completed in March 2000. Led by N M Rothschild, investors included Nicholas Negroponte, Hyundai and Internet Indirect (Mark Slater).

The new funds were to be invested in the **geographic market development**, in order to launch the venture in Germany. With its larger, more geographically dispersed market, a strong launch was required to quickly sign up the key service providers to the site. The German operation required a greater investment in sales based tactics; this was especially the case when there was no plan for a large-scale mass advertising campaign, as was the case for the UK domestic-residential service. The German expansion was enjoying the tested established technology and operations which could be easily transferred from the UK parent.

In addition, £2 million was planned for business development via the launching of the commercial service in the UK. With its low relative marketing cost and existing relationships, as well as a strong partnership with Dun & Bradstreet, the commercial line of business was expected to be leveraging off the established and successful strategies of the residential service.

Finally, another £1.5 million was to be invested in extending and improving the technology base, building partnerships with Hyundai in the markets of Korea, Japan and China.

Another growth opportunity: the commercial sector

The management executives of ihavemoved.com believed that there are two linked, but distinct opportunities in the commercial area. One is companies, especially SMEs, which move and the other is new businesses that need to inform the market place of their launch.

Commercial Address Change: Business and other organizations that change address, must notify hundreds of organisations of their address change, which can be a very onerous task for smaller firms. By expanding the existing service provider relationships, ihavemoved.com can provide this service to companies and attract payment from their service providers.

New Business Adresses: The second opportunity was to address the new company market. There is a myriad of tasks involved in establishing a new company. Many functions are administrative, and could easily be provided by an interface such as that employed by ihavemoved.com. Certainly when setting up accounts with utilities, telecoms, office furniture and stationery companies, significant new customer commissions can be derived.

The German opportunity

There was an even greater need for ihavemoved.com service in Germany than there is in the UK. Germans are 25% more likely to move home than people from Britain. Also, approximately 18 million Germans were then online, substantially more than in the UK. Furthermore, German law (the Meldegesetz, originally from the 19th century) requires citizens to notify the Government of an address change through a lengthy and frustrating process at the 'Einwohnermeldeamt'. Bremen's 'virtual city hall' initiative, which enables online address changes secured by a digital signature, is one of the preludes to e-government in Germany.

Thus, the strong ties of the ihavemoved.com team with government strengthened the position of ich-zieh-um.de to achieve its goal: simply to be the address change standard in Germany.

Positive economics about demographics: With 13% of the population between the ages of 18 and 55 moving each year, a higher proportion than in other European countries, and the large online population, ich-zieh-um.de estimated there were 2.3 million online movers in Germany each year. A 5% market share for ihavemoved.com Germany would mean 115,000 customers a year. Assuming that every user changes 10 addresses and signs up to 0.5 new contracts on average, ihavemoved.com Germany would conduct 1.2 million address changes and complete 57,500 new contracts.

Based on the market analysis, German operations would have expanded ihavemoved.com's pool of aggregate data, enabling cross-border comparisons and data mining. When compared and contrasted to UK market information, and data that could be sourced from other countries, the overall value of the information was greatly enhanced. The company would also be able to facilitate relocations between the two countries, for example a

banker would be able to disconnect from RWE in Frankfurt, and reconnect to PowerGen in London. Cross-country relocation of executives is an on-going phenomenon that could induce push-niche marketing.

The market

In the beginning, ihavemoved.com had limited competition in the UK and German domestic markets, and none in the UK commercial market. The Post Office and SimplyMove (www.simplymove.co.uk) were the only potential UK competitors. They were the other two participants in the three-way government change of address pilot programme. Simplymove had 6 employees, of which 5 were directors drawing no salary. They were averaging three changes of address per day, and were looking for £750,000 in funding. The Post Office was looking to use its branch network to provide kiosks for address changers, and combine this with a web-based offering. Then, the Post Office was only diverting mail, rather than changing address. There were no address change services in Germany, and no commercial address change services in either the UK or Germany.

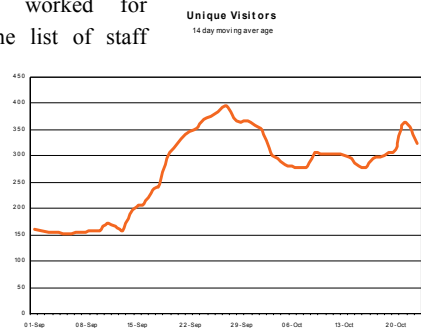
In the light of the celebrated internet entrepreneurship, ihavemoved.com was one of the most publicized web ventures in the country, averaging 4 mentions in the press every week in its first 10 months and featuring on CNN every 3 months.

The growth capability – resources - team

Five months after it was established, ihavemoved.com has managed to grow from 4 to 21 employees, including a technical team of 8 and a sales force of 9. The company had a dedicated government lobbyist, and regional sales people based in Cardiff, Leeds and Glasgow. All staff had equity participation through an employee option scheme, and a participative management style means they have a high level of input into decision making. The founding team of 4 directors with backgrounds in corporate finance at Merrill Lynch, Internet consultancy, venture capital and advertising at Olgivy Direct were supplemented by a CTO with 15 years experience and a sales manager with 7 years experience. This team has opened a German office, expanded operations and secured partnerships with leading companies in the space of six months.

Strategic guidance was provided by a board of advisors which included Nicholas Negroponte, Tony Anderson (ex-Marketing Director of EasyJet, EasyGroup;also worked for www.egg.com) and Jerry Goldstein. Appendix A gives the list of staff members and their qualifications

Maintaining a cohesive corporate culture, clear focus and strong direction was inevitably a challenge under these circumstances. While this has been achieved, as the company continued to grow, more structure, processes and different management skills and capabilities were essential. There was thinking about hiring an experienced CEO to manage UK operations.



The exit route

For US companies, having a European presence would contribute significantly to valuation, especially if it covers a variety of countries, languages and privacy regimes. The effort and perceived risk of implementing this type of operation was high for a US company. With a number of US companies beginning to seriously investigate the European market (including TMP through *monstermoving.co.uk* and Cendant with *move.co.uk*, the *ihavemoved.com* venture seemed to be a logical fit.



The acquisition front-runner, TMP, had already purchased six moving-related dot.coms in the US to build its *monstermoving.com* service. Looking to extend this to the UK, TMP engaged in partnership discussions with *ihavemoved.com*. The other likely purchasers of *ihavemoved.com* included those looking to move up and down the value chain. Retailers of white goods, electrical appliances (e.g. Dixons), brown goods and home services have always keen to 'control' the new mover market. At the other end, real estate chains— especially those with on-line service- saw this as a valuable service to clients and hence a differentiation mechanism. To online content providers and other forms of portal, *ihavemoved.com* service represented compelling value adding content for their traffic. Finally, *ihavemoved.com* was a natural progression for existing aggregators of personal information. Again, those aggregators who are already online were most likely to recognise the value of *ihavemoved.com*.

There were two potential German purchasers for whom *ihavemoved.com* / *ich-zieh-um.de* would represent a perfect complement of their business activities; Deutsche Post and Bertelsmann. Deutsche Post is the German monopoly for mail forwarding and offers this service for free to its customers, meaning that Deutsche Post itself has to bear all costs associated with the forwarding process. A service like *ich-zieh-um.de*, which helps to reduce the number of forwardings because it provides all relevant entities with accurate address information, would mean a cost saving for Deutsche Post.



Deutsche Post

Also, Deutsche Post was and remains one of the largest players in Germany when it comes to direct marketing. Not only because most direct marketing is conducted via its offline mail system, but also because Deutsche Post derives information from monitoring addresses when it forwards letters. This is provided to German companies that are involved in direct marketing, all of which are Deutsche Post customers.

Traditionally an offline business, Deutsche Post has already begun its transformation into a modern business with an e-strategy. For example, it is offering free e-mail addresses via its Internet platform. The company was scheduled for privatisation at the end of 2000, which would increase pressure for modernisation, as well as providing access to significant liquidity. A venture fund, which was mandated to invest in postal-related Internet businesses, was then being formed. Thus, *ich-zieh-um.de* would be a perfect mailing-related investment for Deutsche Post and also perfect content for its portal.

While the company could possibly build its own service, Deutsche Post was a slow moving business, still more of a public service than a private company. Having been a monopoly for over a century has had an impact on corporate culture. The company would have to set up a small satellite to develop the service for Germany. The

purchase of ich-zieh-um.de would be a faster way to offer an online address change service, and by acquiring a young and fast moving Internet start-up, innovation and product extension would be enhanced.

Bertelsmann

Bertelsmann AG is one of the largest media companies of the world, combining all sorts of media: internet, TV, publishing, etc. Also, Bertelsmann is the most innovative and powerful company in direct marketing in Germany. This has a long tradition, with Bertelsmann's 'Buchclub' being one of the first direct selling retail projects in Germany.

Since ich-zieh-um.de was in the business of generating a database of unprecedented depth about consumer preferences (plus the prospects of an updated commercial database of startups and moving SMEs) evidently it could strategically fit into Bertelsmann AG and its portfolio of businesses. Again, Bertelsmann could potentially build something similar to ich-zieh-um.de, but this would take longer and be more expensive than buying. It would also mean that Bertelsmann was entering the market as a second mover.

Whilst flotation on a lower tier stock market was certainly possible, strategically the corporate value of ihavemoved.com was to be maximised via a trade sale to a player that could build synergetic capital. Furthermore, the stringent due diligence requirements, professional fees and management time required for road shows could be debilitating for a fast-growing company. Given this, an IPO would best be considered once ihavemoved.com has matured into a firm with deep management, which was well established and has achieved a profitable trading position. Finally, the stability and appetite of the public markets need to be carefully judged.

The strategic exploration of the ihavemoved.com team about the next phase of their entrepreneurial journey was overshadowed by a sense of cautious optimism. Their venture so far has epitomized that growing a business is different from the business of venturing out. In the end, Royal Mail and Deutsche Post, their rivals and the goliaths of the industry with appetites for entrepreneurial innovations did buy them out.

And the entrepreneurial journey continues to create value for all stakeholders. You don't have to move to visit www.iammoving.com, for the latest news.

Appendix A List of staff members and their qualifications

E. David Anstee, BCom (Melbourne), MBA (London Business School)

David has four years of experience in equity raising and corporate finance with Merrill Lynch Australia. He spent his summer break working with Arts Alliance, a London-based venture capitalist, vetting business plans, meeting portfolio companies and working on a business plan under a scholarship scheme. With a focus on entrepreneurial studies both at London Business School and while on exchange to the Haas School of Business at UC Berkeley, David is responsible for the financial performance of the company, German operations and investor relations.

Francesco Benincasa, BSc (Cardiff), IOD

As managing director and founder of the Chameleon Group, Francesco has worked in web communications and strategic planning since 1995. He has delivered pioneering web strategies to McKinsey Consulting, the BBC, NCR, Evolution Consulting, McGregor Boyall and TrustWorks. Francesco's responsibilities include online marketing, relationships with key partners, and white label integration.

Nicholas Komninos, BA, BAS(Penn), MBA (London Business School)

Prior to his MBA, Nicholas was a Flight Sergeant for the Hellenic Air Force, dealing extensively with HR related issues, then an Account Executive for OgilvyOne advertising where he planned, conducted and evaluated international marketing campaigns. He has an academic background in Psychology and practical experience in designing HRM systems during his summer internship at Qualco Management Consultants. Nicholas was one of the co-founders of a private tutoring service for the students of the American College of Greece. He is responsible for maintaining the fast growth of ihavemoved.com as marketing director and human resources manager.

Onic Palandjian, BSc (Bentley), Bus. Admin. (Harvard)

With experience as a venture capital executive in the US, Onic has evaluated and refined the business models of a variety of Internet and e-commerce enterprises. He has conducted business in the former Soviet Union under uncertain and difficult circumstances and worked on the financial and operational areas of a global shipping company. Onic works on securing partners and alliances for ihavemoved.com, as well as the commercial offering.

Andrew Day – CTO, BSc (Aberdeen), MSc (Edinburgh)

Information technology has been a part of Andrew's life since he was thirteen years old, when he wrote the first published machine code version of the game Space Invaders in 1977. From 1991 to 1995 Andrew thrived in the banking sector, having worked with Bank of America, Hoare Govett, Banque Paribas, Natwest Capital Markets and Security Pacific to name but a few. Founding a company in 1995 to offer online information services, he could be viewed as one of the original dot commers. Before joining Ihavemoved.com in June, Andrew provided consultancy services to Virgin Mobile Phones.

Ed Preedy – Sales Manager, BSc. (Bristol)

Ed has over seven years of sales and business development experience, and was brought into build up the sales team and to strengthen ihavemoved.com's ability to attract the remaining service providers. He has been able to offer valuable experience of developing new business functions with start-ups and expanding companies. Selling recruitment and latterly Internet solutions to major corporations, has meant that Ed understands the processes necessary to attract new business and can impart that within the sales team. With a passion for deal making that was honed in the entrepreneurial environment of Rotch, Ed has a natural flair for finding new revenue opportunities for ihavemoved.com.

Philip Chalmers – Government Business Development

Formerly involved with politics, Philip is primarily focussing on securing strong relations with central government through the Cabinet Office CITU, and with individual government departments. His contacts, within the network of special advisors allow him to get to the decision makers more quickly, and with a more sympathetic hearing. Philip's experience of the inner workings of government at the highest level ensures that ihavemoved.com communicate with civil servants in a manner which they recognise, and with which they are comfortable.

Miles Sampson – Website Manager, BA, MA, (Edinburgh)

Miles is site producer with overall responsibility for content and user experience. He first came into contact with the ihavemoved.com project while he was web manager for London Business School. It was here that he met David and Niko and covered the early incarnation of the site for the School. At London Business School he managed the development and launch of the first integrated site and oversaw the development of the School's most sophisticated marketing and communication tool. His pedigree in the internet dates back to 1995 when he produced the UK's first online University prospectus

Mathew Barnett – Operations

Matt has over 7 years of experience in production control and project management, being responsible for teams of around 15-20 employees and working on a client facing basis with companies such as Asda, Marks and Spencers, 3 Com, Hewlett Packard and the Ministry of Defence on projects with timescales ranging from a few weeks to many months. Matthew has designed, implemented and monitored procedures, process controls and improvements, as well as MRP and TQC mainly within a manufacturing environment. Matt is responsible for operations, processing offline customers, implementation of ASP and white label sites as well as ihavemoved.com's extranet solution.

Nicci Parry – Communications Manager, BSc Hons (Wales), MSc (Surrey)

Nicci joined ihavemoved.com from a public relations agency. She has over three years experience in managing and implementing communications strategies and tactics to meet clients' marketing objectives. She plays a key role in the management of ihavemoved.com's marketing plans, including budgeting, planning, liaison with PR agency, writing the monthly newsletter, organisation of shows, symposia and distribution of offline change of address forms.

Ryan Botsford – Business Development, BA (Michigan)

Ryan's experience in sales, gained during his time with J. Rothschild Assurance, along with his exposure to various industries during his time at National Securities has assisted him in the development of partnerships with organisations from diverse sectors.

Duncan Miles – Network Administrator, BEng. (Richmond Upon Thames)

Duncan was originally trained in petrochemical engineering, eventually gaining nine years experience in an IT UNIX environment working for software houses and large multi-national engineering corporations. As an experienced Systems Analyst, Duncan has demonstrated ability in delivering comprehensive software solutions, developments, administration and application support on seven major projects. Duncan is responsible for systems management and administration including security policy making, solutions and implementation.

Claire Taylor – Customer Care, Dip Business and Finance (BTEC)

Claire has eight years experience in various secretarial roles with companies such as CgMs Planning Consultancy, Andersen Consulting and Deloitte Consulting. She attended Basildon College studying a BTEC Diploma in Business and Finance. She has learnt a variety of different skills within her roles and has a wide knowledge of Microsoft systems.

Ruth Baigent – Programmer, BA Hons (Warwick)

Ruth studied philosophy at the University of Warwick - where research areas included logic and the philosophy and future of technology. Starting in the Department of Education, Ruth designed and built an intranet site to cope with the delivery of briefing information to Ministers. Ruth worked as a Web Developer at Oyster Partners on Web projects with high profile clients such as the Victoria and Albert Museum, Widelearning, Experian and Worldlink. Her experience includes Web site design and specification, technical management and recruitment, and XML/XSL, Perl, Javascript, HTML and Flash. Ruth is concentrating on building up a really cool and useable website, generating constant innovation.

Marlene – Business Development, BA Hons (Sheffield Hallam)

Marlène has experience in direct sales, this combined with determination and experience in selling concepts is proving invaluable. She also has experience in launching a student portal – during which developing relationships with educational institutions and commercial companies was crucial. She also carried out a consultancy role to define strategy for the student market, which is a key market for ihavemoved.com. She is a keen creative and lateral thinker and is applying this to her role within ihavemoved.com. Marlène is now signing up and managing companies in Retail, Travel and Motoring.

Francesca – Marketing Assistant, BA (Tufts), MA (Westminster)

With experience in working in close contact with the producers and executive producers of a production company on many commercials, such as Nestle (Gran Dessert) and Olivetti, Francesca was in charge of maintaining contacts with other production companies and organising public relations events. She also worked for a worldwide magazine where she researched information for reporters through internet and direct contacts. She was in charge of 'Cosmobytes' column and had two articles published.

Jules Beston – Programmer, BSc, BEng (Sydney)

Jules is a qualified computer scientist and mechatronic engineer. He graduated in both degrees from the University of Sydney, one of Australia's premier universities. His qualifications make him an excellent software engineer, with a sound knowledge of the underlying electrical and mechanical disciplines involved plus the management and problem solving skills that an engineering degree provides.

Stuart – HTML Coder, BSc (Glasgow)

Stuart recently completed his Postgraduate Diploma in IT, for which he gained a distinction. This course involved a range of important topics including database design, programming and networking. Stuart specialised in Web Development and Multimedia. After finishing his course, Stuart moved to London to work for Altodigital.com, which develops and hosts web and e-commerce sites for small to medium size businesses.

Sharon – Finance Assistant, BCL Hons (Cork), MBus (Limerick)

Sharon has over six years of experience as a qualified Lawyer in Ireland. She has also an honours Master's degree in Business (Entrepreneurship) which focused on small business development and growth as well as business consultancy. As part of a team project during the course, she was successful in obtaining a national first prize for Excellence in Business Planning. She is working in the finance area and as corporate counsel for the company.

Till Tolkemitt - Finance in Germany, PhD (Hamburg)

Before joining ich-zieh-um.de as one of the three directors founding the German office, Till completed his PhD in economics at the University of Hamburg, was involved in another start-up project (globalizer.com), worked in consulting and went to the University of California at Berkeley as a research associate.

Dirk Thiede - Marketing in Germany, MBA (Hamburg)

Dirk has been doing marketing and sales since he left school. Trading telephone equipment, doing telemarketing, import & export – he's seen it all. For the last 4 years, he was at T-mobil, Germany's biggest mobile communication provider, first as a Product Manager, and later as a Senior Manager in international marketing. His knowledge of branding, communication and product development will ensure ich-zieh-um.de attains a high profile with its target group. His sales experience and knowledge of the telecoms sector make him ideally suited to sales in this sector.

Jens Thiede - Sales in Germany, MEng (Hamburg)

As an engineer and architect, Jens has deep experience in project planning and negotiations. He is founder of a successful architecture company in Hamburg and has knowledge in developing small businesses. His strong analytical skills are mixed with his creative part – never accepting things just because they were always done in a certain way. He was founding member of a group of artists and an office for urban planning.

Case 5.6. A micro consultancy with a European business: The case of “Europa Consultancy” Ltd.

By *Michelle Perello and Lucía Dobarro Delgado*, Department of International Networks of Innovation and Projects, Instituto Tecnológico de Canarias S.A

Introduction

In 2003 Virginia obtained her University degree in International and Diplomatic Sciences. Her university studies had provided her with knowledge in a wide range of disciplines (economics, politics and law) and with a specialization in the economics of developing countries. After completing her university studies, she realized she did not really know what kind of job she wanted. She knew that she liked speaking foreign languages very much (she spoke her mother tongue Italian as well as English, French, German and Spanish) and wanted to find a job in an international context but there was no specific sector which particularly attracted her. She wrote her final dissertation thesis on structural funds⁷⁴ and she was generally interested in European policies. Six months after her graduation, she decided to attend a specialization course on European project development and management. At the same time, since the course was only part-time, she found a paid traineeship with an NGO which dealt with medical projects in Africa.

The entrepreneurial spirit: Immediately after the completion of her specialization course in 2004, she was offered by coincidence (but coincidences will play an important role in this story) a job in a consultancy company to support the regional government in her region (Piedmont, Italy) in the administration of the structural funds programme. She was based at the regional government’s premises and her role was to coordinate with the consultancy company which was located in Rome. She worked there for two years until she received a call from the European Commission. She had been accepted as a trainee at the Directorate General for Regional Policy, which was responsible for the management of structural funds! This should not surprise the reader because when she was still studying at the University, she had started applying to the European Commission for a traineeship there. The applications were open every six months and each time she sent her candidature but she did not make the final selection. She was already working at the regional government when she decided to have one last try for this traineeship, “I will still apply this time but this will be the last one!” she thought, while clicking on the submit button.

This opportunity meant she would have to change her life, even if for only a few months. She had a secure job and had recently bought a small flat but nonetheless she wanted to take this opportunity. She agreed with her boss that she would try to collaborate at distance with them and in exchange they would keep the job open for when she came back. So, in March 2006 she left for Brussels.

The traineeship was very interesting but it was clear that there were no future employment opportunities so she was ready to return to her life to Italy when one day she received a call from one of her colleagues at the

⁷⁴ Structural funds are a pool of funds from the European Union to finance the European Regional Policy which aims at reducing the disparity between more and less developed regions in Europe.

Commission. He had just had a meeting with the director of an institution in the Canary Islands who was looking for a person to hire as their representative in Brussels.. Virginia's colleague had recommended her to this person and now he wanted to interview her. Virginia was extremely surprised: "I had just accepted that I would have to go back to my normal life in Italy and then this opportunity appeared from nowhere and besides. I wasn't even sure where the Canary Islands were!" Still, she decided to attend the interview. The job sounded very interesting but it would demand a high degree of flexibility, including working as a freelance and not as an employee. As Brussels representative she would have to become familiar with the European decision making procedure, with the lobbying network and mechanisms and with the European funding programmes, and then advise the institutions on opportunities for European projects and collaborations. She was excited by this new challenge and accepted.

The company: In 2008, after two years working as a freelance advisor to a European project, she had acquired a thorough knowledge of the EU system and the Brussels environment and solid experience in project development and management. Moreover her freelance status allowed her to get other short-term with other entities and to spot new business opportunities. She realized that if she had her own company she could submit projects to be funded under European programmes instead of simply advising other institutions on how to apply for these funds. She had just spotted a new business opportunity, but to exploit it she needed to establish a company.

She started thinking about it but several doubts came into her mind: "*Shall I do it alone or try to find a partner? I do not know anybody whom I really trust or who has an entrepreneurial mind...*" "*What about the other competitors? What could I offer that would be more or different than them?*" "*What if I fail?*"... Besides she has also to decide where to establish her business: she was practically living for half of the year on the Spanish Canary Islands, and the other half in Brussels and she could not make up her mind which place was better.

She thought she could apply for a master's course in business administration to learn how to establish and run a business but the investment in terms of time and tuition fees was too high. She started then collecting information and opinions from her parents, family members, colleagues and friends. She also asked entrepreneurs about their experiences. Some of her friends supported her "*You have determination, a sense of initiative and leadership, and these are the characteristics every entrepreneur should have,*" some said. But others tried to dissuade her: "*You'll have a lot of work and won't have any time left for your personal life.*" Besides, the economic crisis had just started and the economic outlook began to look worse and worse each day. She even consulted the director of one of the companies she was collaborating with and he advised her not to take this step at such a difficult time.

She checked their competitor's websites to understand which were their business models and what were they really offering to the market. She also took an appointment with the business support organizations in both countries to assess the services offered in each country and the requirements for starting up a business.

This whole process took one year but in the end she decided to take the final step and in November 2009 she founded her company 'Europa consultancy Ltd'. Her decision was based on the following assumptions:

- she did not really have very much to lose with respect to her current situation and if she failed she would have learnt an important lesson
- her business model would be based on the identification of a specific geographic market where other competitors had not yet established themselves

- her company should have really low costs to ensure higher benefits and this was possible since she had no real need for infrastructure or equipment

After some months the amount of work had already greatly increased and she realized she was not able to manage everything alone and that she needed to hire somebody. This decision was even tougher than the one concerning the establishment of the company. "How can I choose the right person? How can I be sure that I have enough financial autonomy to hire someone? What if I hire this person and I am not satisfied with his/her work? Could I fire him/her? How would I feel then?" Again she was overwhelmed by these questions and could not find the right answers. She decided again to consult friends and colleagues. Those who did not have a business were only able to provide general advice, but one colleague at work, who had previously run a business told her: "You should hire somebody only if you have 8 times the financial resources you need for your current costs, including the staff cost." Virginia was astonished: "I would never get to that point, which means I would never hire anybody. But then I need somebody to help me in order to develop the business. This is vicious circle!"

She could not make up her mind. She was afraid that in a certain sense she was losing business opportunities because she did not have enough time to manage all the projects and work on business development activities as well. But at the same time she was not able to assess the cost-benefit of hiring somebody. She was wondering what her approach should be: "*Shall I look for somebody with little experience so that I can train her/him and pay a lower salary or shall I hire a person with relevant experience which could contribute decisively to the company's business, even if this person demanded a higher salary?*" She also had to take into consideration that her employee would need to be able to work independently since she was abroad very often.

This time she could not make up her mind...

Help Virginia take a decision! Do you think she should hire somebody and why? If you think she should look for an employee, what profile would be most appropriate? How would you manage the whole process, from the publication of the vacancy to the signature of the contract?

In the case of Virginia, it is clear that she had an entrepreneurial mindset: she was not too concerned about the risk of failure and she was not concerned about having a 9-to-5 job, but she did not really have knowledge of business development and management. How much do you think the entrepreneurial spirit and the business management skills are fundamental when establishing a business? What would you have done in her case?

Nowadays, thanks to information and communication technologies, establishing a business does not require any infrastructure investment or fixed costs. Do you think this is an advantage or are there any negative aspects to be taken into considerations?