Strategic Management

Lecture Thirteen: Artificial Intelligence (AI) and Strategic Decision Making

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Introduction

- In our previous lecture, we explored how innovation acts as a catalyst for strategic transformation.
- We connected innovation and disruptive strategy
- We examined how companies that fail to adapt to emerging technologies and new business models risk being overtaken by more agile competitors.
- We reflected on case examples such as Kodak and Netflix to understand how innovation can be either a threat or an opportunity depending on strategic response
- In the current lecture we will further this by looking at AI and decision-making within the context of strategic management.

Learning Outcomes

- Define Artificial Intelligence (AI) and its relevance to strategic management.
- Analyze how AI is influencing strategic decision-making processes in organizations.
- Evaluate both the opportunities and risks that AI introduces in strategy formulation and execution.
- Reflect on how AI can be applied in personal and professional decision-making contexts.

Opening Case: Zara and AI-Powered Strategy

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Zara, the global fashion retailer, has been integrating Artificial Intelligence in various aspects of its strategy. The company uses AI to analyze customer behavior and predict fashion trends with high accuracy.

AI tools assist in managing inventory, streamlining the supply chain, and reducing overproduction. Zara also employs AI-driven data analytics to understand localized fashion demands, allowing the company to tailor its offerings to specific markets swiftly.

AI has been implemented to provide tailored recommendations based on browsing history, past purchases, and wish list items.

Zara has incorporated AI features in stores such as smart mirrors. These mirrors allow shoppers to scan a product and, using Radio Frequency Identification (RFID), view a reflected holographic image along with other products that pair well with their preferences (USM, 2025).

Reflection Questions:

- How does Zara use AI to enhance its strategic agility?
- What are the potential risks of relying too heavily on AI for strategic decisions?
- Could such use of AI be replicated in other industries or contexts?

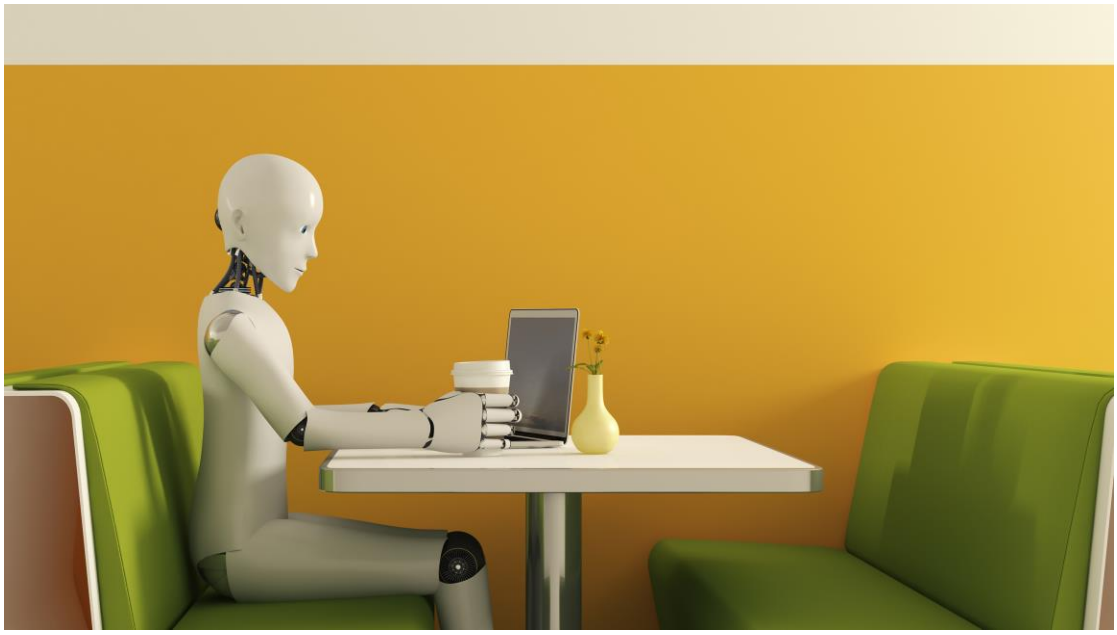

Image source: Microsoft 365 stock images

Artificial Intelligence

Artificial Intelligence refers to the capability of machines to mimic human intelligence processes such as learning, reasoning, problem-solving, perception, language understanding, and self-correction (Copeland, & B.J 2025).

AI is applied in various ways today such as virtual assistants in many gadgets (Siri, Alexa, Google assistant), making recommendations in systems like online shopping, and in driverless vehicles.

In strategic management, AI is not just a technological tool but a game-changer influencing how companies formulate and implement strategies.

Types of Artificial Intelligence

When we talk about Artificial Intelligence (AI), it's helpful to know that not all AI is created equal. Think of AI as existing on a scale—from tools that are very task-specific to systems that could one day be smarter than all of us combined.

Let's break it down into three types: Narrow AI, General AI, and Superintelligent AI.

1. Narrow AI – What We Have Now

This is the AI we interact with every day, even without always realizing it.

Narrow AI (sometimes called Weak AI) is designed to do one job really well. It doesn't think like a human; instead, it focuses on a specific task and often performs it better or faster than we can. But ask it to do something outside that task, it will be lost and probably be unable.

You have probably used Narrow AI if you've:

- Asked Siri or Alexa to play music
- Typed into Google Search
- Watched Netflix's movie recommendations
- Chatted with a virtual assistant on a website
- Received a fraud alert from your bank

These are all examples of Narrow AI at work.

Why does this matter for strategy?

- Because most businesses today are already using Narrow AI, even if they don't call it that.
- It helps leaders make quicker, data-informed decisions, spot trends, manage inventory, predict customer needs, and automate routine work.
- It doesn't replace human strategic thinking, but it definitely enhances it.

2. General AI – The Big Dream

Now imagine an AI that can do everything a person can; solve problems, understand emotions, learn from experience, and even be creative.

That's General AI, also called Strong AI. It's the kind of intelligence we see in movies; like robots that can think, feel, and make decisions just like (or better than) you.

It is important to note that we are not there yet. General AI is still a theoretical concept. Researchers are working on it, but no one has built a machine that can fully replicate human intelligence across multiple domains.

Why should we care about it in strategy?

- Because if or when it becomes real, General AI could change everything.
- Companies might rely on AI not just for data analysis but for formulating and leading entire strategies; learning from markets in real time, predicting disruptions, and adapting instantly.

- Strategic thinking would become a collaboration between human intuition and machine intelligence.

3. Superintelligent AI – The Wild Future

This is the most advanced and hypothetical form of AI. Superintelligent AI would not only match human intelligence but surpass it in every way: logic, creativity, decision-making, empathy, and beyond.

Think of it as:

- AI that's better than the best humans at everything
- Capable of innovating, leading, negotiating, and even reprogramming itself

Some experts believe it could happen within this century. But others warn it could be risky.

What does this mean for strategic leaders?

- It could rewrite the rules of competition, leadership, and even society itself.
- Leaders would need to think deeply about governance, control, fairness, and ethics.
- It could help us solve major global problems—or, if misused, create new ones.

Fields of AI in Strategy:

1. **Predictive Analytics**: Forecasting customer behavior, market trends, and risks.
2. **Machine Learning**: Enhancing decision-making by learning from data patterns.
3. **Natural Language Processing**: Analyzing customer feedback and market sentiment.
4. **Robotic Process Automation:** Streamlining routine tasks, freeing up resources for strategic functions.

AI and Decision- Making

AI could support strategic decision-making in the following ways:

- **Data-Driven Decisions**: AI enables real-time analysis of vast datasets, helping managers make evidence-based strategic choices.

- **Scenario Planning**: Machine learning models simulate different business scenarios, supporting long-term planning.
- **Customer Insights**: AI tools identify emerging consumer needs, enabling proactive product and service development.
- **Resource Optimization**: AI helps in aligning resources with strategic goals through automated planning and allocation.

Example: Amazon uses AI algorithms to personalize user experience and manage its logistics network, which has become a strategic competitive advantage.

Strategic Opportunities and Risks of AI

Opportunities:

- Enhanced Efficiency: Automates routine decisions and operations.
- Improved Accuracy: Reduces human bias and errors.
- Strategic Innovation: Facilitates the creation of new business models.
- Competitive Advantage: Early adopters can outmaneuver competitors.

Risks:

- Data Privacy Concerns: Misuse of customer data can lead to legal issues.
- Overreliance on Algorithms: May ignore qualitative, contextual insights.
- Workforce Displacement: Job losses in traditional roles.
- Ethical Dilemmas: AI decisions may lack human empathy and values.

Practical Application and Ethical Considerations

While AI can boost strategy, ethical considerations must not be ignored. Leaders must ensure transparency, fairness, and accountability in AI systems.

Best Practices for Ethical AI in Strategy:

- Establish governance frameworks.
- Ensure algorithmic transparency.
- Train teams in AI literacy.
- Blend AI insights with human judgment.

Emerging Trends: The Future of AI in Strategic Management

- **AI-Augmented Leadership**: Managers using AI as co-pilots for strategy.
- **AI and ESG** (Environmental, Social, Governance): AI-driven data informing sustainable strategies.
- **Decentralized Decision-Making**: AI enabling real-time strategic actions at multiple organizational levels.

Personal Reflection: Does AI apply to our lives?

Artificial Intelligence is no longer confined to tech companies; it is embedded in our daily apps, health diagnostics, financial tools, and even career platforms. Reflect on the following:

- How do you already use AI in your daily life (e.g., Google Maps, Netflix recommendations, voice assistants)?
- What decisions, personal or professional, could be improved by data-driven insights?
- What ethical responsibilities do you have as a future leader in using AI tools?
- How will you prepare yourself to thrive in a world where AI is integral to decision-making?

Topic Recap

- AI is reshaping the strategic management landscape.
- From decision-making to innovation, it offers both immense opportunities and complex challenges.
- Strategic leaders must not only understand AI but learn how to harness its power responsibly.
- The future of strategic decision-making lies in a thoughtful blend of human intuition and artificial intelligence.

References

Copeland, & B.J. (2025, May 29). Artificial intelligence (AI) | Definition, Examples, Types, Applications, Companies, & Facts. Encyclopedia Britannica. https://www.britannica.com/technology/artificial-intelligence/Reasoning

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