

ICTs FOR ORGANIZATIONAL TRANSFORMATION



Microsoft. (n.d.). Bing.

Week 5 :
ICT implementation strategies, challenges
and best practices

#Implementation strategies

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ICTs for Organizational Transformation. Week Five (Lecture Five).

Agenda

1.

**Flash back of the
previous Lecture 4.**

2.+

ICT implementation strategies.

1. Needs assessment
2. Technology selection.
3. Change management.
4. Evaluation and monitoring.

Flash back to the previous Lecture 4

Implementation strategies and future trends in e-administration/government.

- Case studies both successful and challenging implementations.
- Future Trends in E-Administration
 - ▣ *Emerging Technologies:*
 - ▣ *Global Practices:*
 - ▣ *Ethical Considerations*

ICT implementation strategies

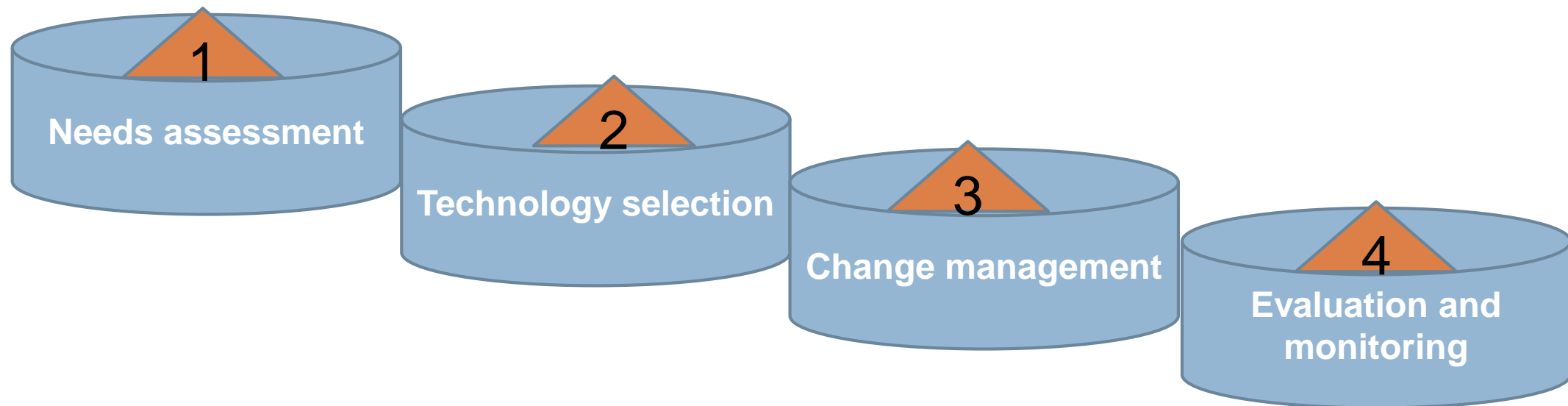
ICTs have become an essential part of our lives, and their influence extends to all sectors, including education, business, healthcare, and government. Effective ICT implementation can significantly improve;

- Efficiency,
- Productivity, and
- Access to information.

ICT implementation strategies

Phases for ICT implementation Strategies

For the Successful implementation of any ICT initiative it has to under go some steps that must appear systematic as seen bellow;



ICT implementation strategies: Needs Assessment

1. Needs Assessment: *Li et al. (2021)*

A thorough needs assessment is the foundation for a successful ICT implementation. It helps in understanding in;

- Knowing Current state,
- Defining goals, and
- Identifying specific problems ICT can address. And these can be achieve by asking questions.

ICT implementation strategies: Needs Assessment

Questions have to be asked when Analyzing the Current State

1. How are tasks currently performed? Are they manual, paper-based, or inefficient?

Possible Answers:

- ▣ Tasks are performed manually, with a lot of paperwork involved.
- ▣ Repetitive tasks are done repeatedly by different staff members.
- ▣ Processes are slow and time-consuming due to lack of automation.
- ▣ Errors are frequent due to manual data entry or calculations.

ICT implementation strategies: Needs Assessment

Question 2. How is information shared within the organization? Are there communication gaps or bottlenecks?

Possible Answers:

- Information is siloed in different departments or on individual computers.
- Communication relies on email, which can be slow and disorganized.
- There's a lack of centralized platform for sharing documents and updates.

ICT implementation strategies: Needs Assessment

Question 3. What existing technologies are currently used? Are they outdated or inadequate?

□ **Possible Answers:**

- Staff relies on outdated software applications that are no longer supported.
- Existing hardware is slow and unreliable, causing performance issues.
- Current technology lacks features needed to perform tasks efficiently.
- Incompatibility between existing systems makes data exchange difficult.

ICT implementation strategies: Needs Assessment

Question 4. What are the technical skill levels of staff and users? What are their specific needs and challenges?

Possible Answers:

- ▣ Staff has varying levels of technical skills, with some needing more training.
- ▣ Users struggle to learn and adapt to new technologies.
- ▣ Specific needs of different departments or user groups need to be addressed.

ICT implementation strategies:

Technology Selection

2. Technology Selection *Albukhitan, S. (2020).* : Selecting the right technology is crucial for a successful ICT implementation. There are 3 key factors to consider:

1. **Functionality:**

- Choose technology that offers the specific functionalities required to address your needs.
- Don't get overwhelmed by fancy features that won't be used.

2. **Scalability:**

- Consider future growth and choose technology that can scale to meet increasing demands.

3. **Integration:**

- Ensure the chosen technology can integrate seamlessly with existing systems to avoid data silos and redundancy

ICT implementation strategies: Technology Selection

Technology Selection Process:

1. Identify potential solutions	Research available technologies that meet your needs and budget.
2. Evaluate and shortlist:	Compare features, functionality, and suitability based on your criteria.
3. Proof of concept (POC):	If possible, conduct a pilot test with shortlisted technologies to assess real-world performance.
4. Final decision:	Select the technology that best aligns with your needs and offers the most value.

ICT implementation strategies: Technology Selection

Technology Selection Process:

5. Security:	Evaluate the security features of the technology and its compliance with relevant data privacy regulations.
6. User-friendliness:	The technology should be user-friendly and easy for staff and users to learn and adopt.
7. Cost:	Compare costs of different options, including licensing fees, implementation costs, ongoing maintenance, and total cost of ownership (TCO).

ICT implementation strategies: Technology Selection

2. Technology Selection ++

The technology chosen must ensure to have the necessary infrastructure to support it.

Example:

- **Hardware:** This includes computers, servers, network devices.
- **Software:** This includes the core technology software, operating systems, and any additional software needed for functionality.
- **Network connectivity:** A reliable network infrastructure is essential for data transmission and communication between devices.
- **Security infrastructure:** Firewalls, intrusion detection systems, and data encryption are crucial to safeguard your systems and data.

ICT implementation strategies: Technology Selection

Additional Considerations:

- **Scalability:** Design the infrastructure to accommodate future growth and potential upgrades.
- **Redundancy:** Implement backup systems and redundancy measures to minimize downtime in case of failures.
- **Compatibility:** Ensure all hardware and software components are compatible and work together seamlessly.

ICT implementation strategies: Change Management

3. Change Management *Kho, J et al. (2020)* A successful ICT implementation goes beyond just the technology itself. Addressing the human aspect through effective change management is crucial for user adoption and maximizing the benefits of the new system.

ICT implementation strategies: Change Management

How to develop a change management plan ++:

- 1. Communication strategy:** Develop a clear communication plan to keep stakeholders informed throughout the process. This includes explaining the goals of the ICT implementation, timelines, and how it will impact their work.
- 2. Training and support:** Provide comprehensive training programs for staff and users on the new technology. This can include classroom sessions, online tutorials, and ongoing support channels.

ICT implementation strategies: Change Management

How to develop a change management plan++:

3. Addressing resistance: Anticipate and address user concerns and resistance to change. This could involve open communication sessions, addressing fears of job security, and highlighting the benefits of the new technology.

4. User champions: Identify and empower "user champions" within the organization who can advocate for the new technology and provide peer-to-peer support.

ICT implementation strategies: Change Management

Example:

Implementing a new enterprise resource planning (ERP) system can be a complex change. The concern can address by:

- i). Organizing meetings to explain the benefits of the ERP system and how it will streamline workflows.
- ii). Conducting role-specific training sessions tailored to different departments.

ICT implementation strategies: Change Management

Example: Implementing a new enterprise resource planning (ERP)

iii). Setting up a help desk with dedicated staff to answer user questions and troubleshoot issues

iv). Identifying "power users" within each department who can provide support to their colleagues.

ICT implementation strategies: Evaluation and Monitoring

4. Evaluation and Monitoring

Once the ICT system is implemented, it's crucial to evaluate its success and make adjustments as needed and this can be done as follows:

- **Define success metrics:** Establish clear metrics to measure the success of the ICT implementation.

These could include metrics aligned with your initial goals, such as increased efficiency, improved data accuracy, or user satisfaction.

ICT implementation strategies: Evaluation and Monitoring

4. Evaluation and Monitoring

- **Data collection methods:** Develop methods to collect data on these metrics. This could involve user surveys, system usage reports, or performance monitoring tools.
- **Regular evaluation:** Conduct regular evaluations at defined intervals to assess progress and identify areas for improvement.
- **Feedback mechanisms:** Establish feedback mechanisms for users to provide their input on the new system. This can be through surveys, suggestion boxes, or open forum discussions.

ICT implementation strategies: Evaluation and Monitoring

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ICT implementation strategies: Evaluation and Monitoring

□ Example of Evaluation and Monitoring

If a new customer relationship management (CRM) system is implemented to improve customer service. The success can be monitored by:

- Tracking metrics like the number of resolved customer tickets, average resolution time, and customer satisfaction scores.

ICT implementation strategies: Evaluation and Monitoring

Example of Evaluation and Monitoring

- Generating reports on user activity within the CRM system to identify areas where further training might be needed.
- Conducting surveys to gather feedback from customer service representatives on the usability and effectiveness of the new system.

ICT implementation strategies: Evaluation and Monitoring

Note

By continuously evaluating and monitoring the ICT implementation, you can ensure it remains aligned with your goals, adapt to changing needs, and ultimately maximize its value to the organization.

Conclusion

In conclusion, this course provided a roadmap for successful ICT implementation. By following a structured approach that considers needs assessment, technology selection, infrastructure development, change management, and evaluation.

Organizations can avoid common pitfalls and maximize the benefits of ICT. Remember, a thorough needs assessment is key - understanding your goals and the problems ICT can solve ensures you choose the right technology for the job.

Summary's

ICT implementation strategies. Challenges and best practices

1. *Needs assessment*
2. *Technology selection.*
3. *Change management.*
1. *Evaluation and monitoring.*

Next # Challenges and best practices

References

1. *Li, H., Wu, Y., Cao, D., & Wang, Y. (2021). Organizational mindfulness towards digital transformation as a prerequisite of information processing capability to achieve market agility. Journal of Business research, 122, 700-712.*
2. *Albukhitan, S. (2020). Developing digital transformation strategy for manufacturing. Procedia computer science, 170, 664-671.*
3. *Kho, J., Gillespie, N., & Martin-Khan, M. (2020). A systematic scoping review of change management practices used for telemedicine service implementations. BMC health services research, 20, 1-16.*



THANKS

