

Managing Business Information

Module Code: LCLM 5004

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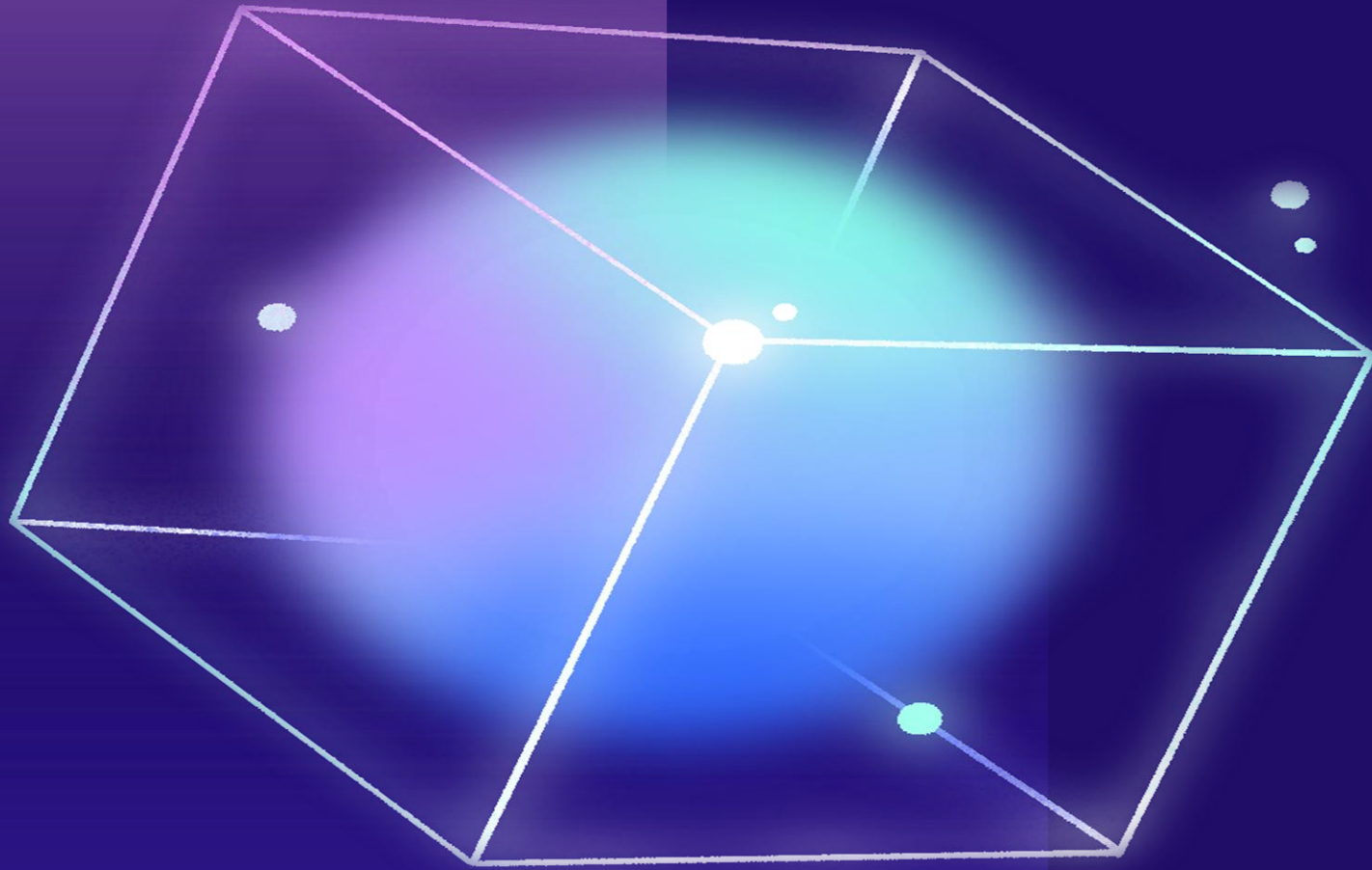
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Introduction to Business Information Systems



Introduction to Information Systems

The information systems contain multiple technological variables such as hardware, software, databases, employees, and business procedures to ensure better information management within organisational dynamics (Awamleh and Ertugan, 2021).

Importance in business operations

- Accelerating the efficiency of operational approaches with the help of automation technologies (Pearlson et al., 2024).
- Improving the effectiveness of the managerial decision - making.
- Developing the communication quality of the organisational dynamic
- Enhancing the service quality to leverage customer experiences.
- Accelerating the competitive advantage of the organisation.

Different Types of Information Systems

Major Types of Information Systems

- Businesses often integrate different information systems which are capable of sustaining their diverse organisational requirements.
- **Transaction Processing Systems (TPS):** Overseeing the routine business transactions such as sales, payroll, and inventory management.
- **Decision Support Systems (DSS):** Improving decision-making and forecasting through evaluating business data.
- **Management Information Systems (MIS):** Accelerating the efficiency of organisational performance monitoring systems.
- **Enterprise Resource Planning (ERP):** Combining the multiple business departments within a one centralised system.



(Faccia and Petratos, 2021)

Analysis and Comparison of Information Systems

- TPS directly accelerates operational efficiency (Adeleke et al., 2022)
- MIS oversees and ensures the effectiveness of the management control and reporting
- ERP enhances communication and coordination across the organisational dynamic
- Diverse variables of the systems provide different beneficial advantages depending on business requirements and objectives.

System	Main Function	Benefits	Limitations
TPS	Process daily transactions	Speed, automation, accuracy	Minimal strategic value
MIS	Generate reports	Better management control	Excessive dependency on accurate input
ERP	Integrates departments	Coordination, efficiency	Increasing implementation costs

Ethical Considerations in Information Systems

Ethical Issues in Business Information Systems

- Excessive reliance on information systems can lead to ethical challenges that require strict managerial approaches to mitigate.

Major ethical concerns

- Data privacy concerns and unauthorised collection of customer information
- Cybersecurity concerns, such as hacking and data breaches (Bedewy, 2024)
- Biased decisions of the algorithm-centric forecasting of Artificial Intelligence systems.
- Lack of workplace privacy due to employee monitoring systems (George et al., 2024)
- Ethical responsibility embedded in the automated system's decision-making



(George et al., 2024)

Real World Case Study 1

Case Study: Amazon

Amazon highlights the integration of advanced information systems into its global operations management (Nweje and Taiwo, 2025).

Systems used

- Enterprise Resource Planning systems
- Warehouse management systems
- Artificial intelligence algorithms
- Automated inventory management

Business challenge

Managerial pressure associated with diverse delivery segments to the global customers while providing fast delivery services (Sarioguz and Miser, 2024).



(Nweje and Taiwo, 2025).

Systems used

- Faster order processing
- Enhanced supply chain efficiency
- Decreased operational costs

Ethical concern

Core ethical concerns are embedded in employee monitoring systems and algorithmic decision-making.

Real World Case Study 2

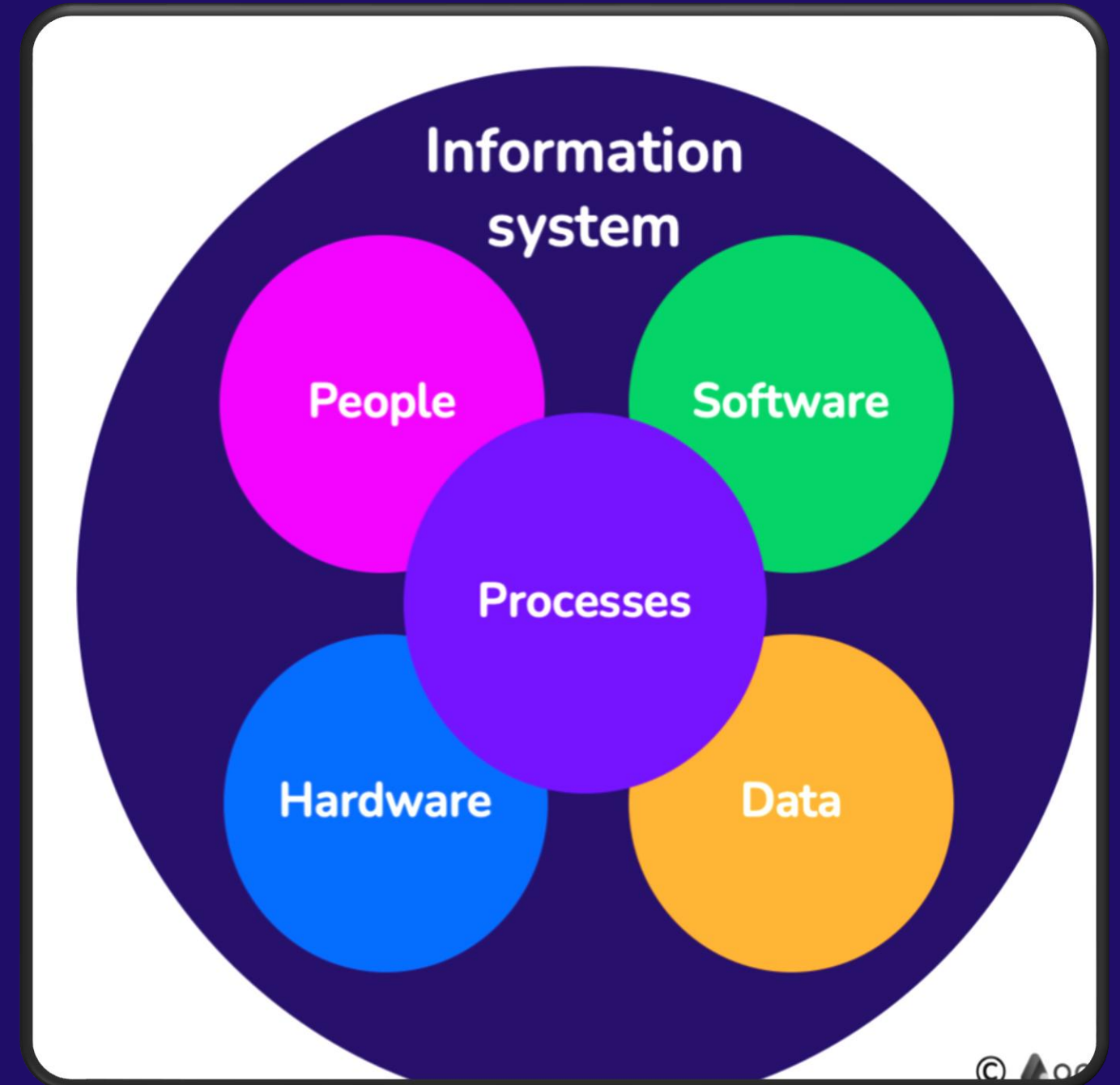
- Walmart uses integrated information systems for managing its global supply chain efficiently.
- System uses: ERP systems, Inventory management systems, and Real-time supply chain tracking (Anozie et al., 2024).
- Organisational impact: Efficient supplier coordination, decreased inventory shortages and enhanced customer satisfaction (Pearlson et al., 2024).
- Critical challenges: Manage stock efficiently across global retail stores.



(Anozie et al., 2024)

Recommendations and Conclusion

- New businesses should adopt information systems efficiently to enhance their operational efficiency.
- Short-term strategy (TPS): TPS for managing regular business operations (Wahsheh et al., 2023).
- Medium-term Strategy (MIS): MIS for management decisions and reporting (Erica et al., 2024).
- Long-term Strategy (ERP): ERP for adding strategic value to organisations (Weerasekara and Gooneratne, 2023).
- Essential actions: Protect customer data, invest in employee training, and cybersecurity systems.



(Erica et al., 2024)

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Thank You

