

Information Systems

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Managing Business Information- LCLM5004

Component 1 Group Presentation

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Introduction to Information Systems

‘Information systems are interrelated components that collect, process, store and distribute information to support decision-making and organisational control’.

(Laudon and Laudon, 2022)

Key Features of Information Systems

- Data management
- Decision support
- Communication and efficiency
- Strategic support

Information systems should align with business strategy and organisational needs, not just technology (Curtis and Cobham, 2008).

SI

Information Systems

Technical

- Hardware
- Software
- Databases
- Networks
- e.g, computers and servers



Sociotechnical

- People
- Processes
- Technology



Business

- Strategy
- Efficiency
- Decisions



Data

Raw unprocessed facts
No context



Information

Data is given context
and meaning



Knowledge

Information is applied to
make decisions

Types of Information Systems

Businesses use various information systems to manage operations, customer relationships, and decision-making. (Gupta et al., 2022)



CRM **Customer Relationship** **Management**

Manages customer service. Marketing and customer relationships



TPS **Transaction** **Processing System**

Records and processes daily business transactions



MIS **Management** **Information System**

Produces reports and information to support managerial decision-making



Local Corner Shop

A case study on how information systems improve efficiency, customer satisfaction and business performance.

Business Challenges

- Manual stock management
- Limited customer retention
- Lack of sales reports

Ethical Considerations

- Protect customer data 
- Sales and customer information should be securely stored
- Businesses should comply with GDPR requirements

Challenge	System Used	Solution
Tracking sales	TPS	Automatically records transactions and updates inventory
Customer retention	CRM	Customer promotions and loyalty programme
Business decisions	MIS	Sales and stock performance reports

Impact on business performance



Faster checkout process



Better stock control



Increased customer loyalty



Better decision-making

Key Takeaway

Together, TPS, CRM and MIS can help a small corner shop improve efficiency, customer satisfaction and business performance.

Customer Relationship Management

Customer Relationship Management (CRM) is an information system that aids businesses in managing customer interactions, sales, marketing and customer service.

BENEFITS

- ✓ Improves customer satisfaction
- ✓ Increases customer loyalty
- ✓ Supports targeted marketing
- ✓ Stores customer information in one place

LIMITATIONS

- Implementation Costs
- Staff training required
- Data privacy and security concerns

SMALL BUSINESS EXAMPLE

Corner Shop Loyalty Scheme

- Records customer purchases
- Sends promotional offers
- Encourages repeat business
- Improves customer retention

Transaction Processing System

A transaction processing system is defined as a system utilised by businesses to record, process, and store daily transactions in real time. It serves as the operational backbone for any organisation (Laudon and Laudon, 2022).



Benefits

- **Real-time transaction processing**
- **Reduces errors**
- **Faster business operations**
- **Automatic stock updates**



Limitations

- **High set-up costs**
- **Staff training needed**
- **Internet/system dependence**
- **Security risks**

Small Business Example

1. **Scans products**
2. **Processes card/cash payments**
3. **Updates stock automatically**
4. **Prints receipts**

Key role: TPS processes sales, maintains stock accuracy and supports efficient daily operations. (Halder¹ and Chakraborty, 2026)

Management Information System

A management Information System (MIS) converts business data into reports and information that aim to support managerial decision-making and business performance (Laudon and Laudon, 2022).

BENEFITS

- Improved decision-making
- Better planning
- Performance monitoring
- Easy access to reports

LIMITATIONS

- Information may be outdated
- Setup and maintenance costs
- Staff training required
- Dependent on data quality

SMALL BUSINESS EXAMPLE

- Weekly sales reports
- Stock level reports
- Tracking monthly revenue
- Identifying best-selling products

Key role: MIS aids managers with reports and insights to support planning, control and decision-making (Hasan and Mahmud, 2024)

Comparison of TPS, CRM and MIS

Comparison summary

- TPS focuses on daily operations
- CRM focuses on customer relationships
- MIS focuses on management reporting and planning
- Together, they improve customer service, efficiency and decision-making.

Feature	TPS	CRM	MIS
Main purpose	Processes daily transactions	Manages customer relationships	Supports decision making
Main users	Operational staff	Sales and marketing staff	Managers
Key benefit	Fast and accurate processing	Improves customer loyalty	Better decision making
Main limitation	Set up and maintenance costs	Data privacy concerns	Depends on accurate data
Example	POS system	Loyalty programme	Sales reports

Ethical Considerations in Information Systems



Issue 1: Data Privacy

- Customer data protection and storage require protection
- Compliance with GDPR is mandatory (Sourav, Khan and Akash, 2020)



Issue 2: Data Security

- Systems may be vulnerable to hacking or data breaches
- Use strong passwords, encryption and provide staff training



Issue 3: Employee Monitoring

- Information systems can track employee performance and activity
- Excessive monitoring may raise privacy concerns (Evans et al., 2022)



Issue 4: Data Accuracy and Bias

- Incorrect or inaccurate data may lead to poor decisions
- Regular review and verification of data are essential

Recommendations



Adhere strictly to
GDPR

Implement
cybersecurity
measures



Maintain transparency
about data collection
practices



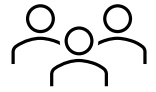
Conduct regular
data accuracy
checks



Case Study: Netflix

How Netflix uses Information Systems to drive success

NETFLIX



Netflix is a global streaming service with over 300 million paid memberships in more than 190 countries.

TPS (Transaction Processing System)



- Processes subscription payments securely
- Manages account registrations, updates and cancellations.
- Handles billing transactions and sends payment confirmation

Example: When a user subscribes to or updates their plan, TPS records the transaction and updates the account in real time

CRM (Customer Relationship Management)



- Collects and stores data on viewing history, preferences and ratings
- Provides personalised content recommendations
- Improves customer satisfaction

Example: Netflix uses your watch history to recommend shows and movies you are likely to enjoy

MIS (Management Information System)



- Analyses viewing trends and user behaviour
- Generates reports on subscriber growth, content performance and revenue
- Supports strategic decision-making for content and marketing

Example: Management uses MIS reports to decide which content to produce, acquire or promote



Impact on Business

- ✓ Enhanced customer experience through personalised content
- ✓ High customer retention and loyalty
- ✓ Efficient subscription and billing management



- Data privacy and security concerns
- Compliance with GDPR
- Maintaining customer trust while using personal data for recommendations

Recommendations



1. Introduce CRM

- Increase customer loyalty
- Improve customer service
- Support marketing activities



2. Implement TPS

- Improve transaction processing
- Reduce errors
- Improve stock management



3. Use MIS

- Generate management reports
- Improve decision-making
- Monitor business performance



Final Recommendation

A combination of TPS, CRM and MIS is recommended to improve efficiency, customer relationships and business performance

Conclusion



Information systems are essential to enhancing business operations and decision-making.



TPS helps to manage daily transactions and inventory effectively.



CRM helps businesses build stronger customer relationships and improve customer loyalty.



MIS provides managers with valuable reports and insights for informed decision-making.



These systems together can help small businesses improve efficiency, customer satisfaction and overall business performance.

Finally, the successful implementation of TPS, CRM and MIS can provide a competitive advantage and support long-term growth for small businesses.

Thank You



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Thank you for
listening

References

- Curtis, G. and Cobham, D., 2008. *Business information systems: Analysis, design and practice*. Pearson Education.
- Evans-Uzosike, I.O., Okatta, C.G., Otokiti, B.O., Ejike, O.G. and Kufile, O.T., 2022. Ethical governance of AI-embedded HR systems: A review of algorithmic transparency, compliance protocols, and federated learning applications in workforce surveillance. *International Scientific Refereed Research Journal*, 5(5), pp.125-136.
- Gupta, S.K., Ambashtha, K.L. and Kumar, R., 2022. Challenges and opportunities of management information systems in business. *NIU International Journal of Human Rights*, 9(1), pp.22-28.
- Halder¹, S. and Chakraborty, S.P., 2026. Adoption and Impact of POS Systems in Kolkata's Retail Sector: A Study on Digital Transformation, Challenges, and Opportunities. *Proceedings of the Global Innovation and Technology Summit "AAROHAN 3.0" _HSS Track (GITS-HSS 2025)*, p.91.
- Hasan, O. and Mahmud, O., 2024. Systemtic Review Enhancing Business Intelligence through Data Science Integration in MIS Platforms. *Strategic Data Management and Innovation*, 1(01), pp.23-29.
- Laudon, K.C. and Laudon, J.P. (2022) *Management Information Systems: Managing the Digital Firm*. 17th edn. Harlow: Pearson.
- Netflix, Inc. (2025) Annual Report 2025 (Form 10-K). Los Gatos, CA: Netflix, Inc. Available at: https://s22.q4cdn.com/959853165/files/doc_financials/2025/ar/99482238-46b2-4d0d-b292-40e6781bdf03.pdf (Accessed: 10 June 2026).
- Sourav, M.S.A., Khan, M.I. and Akash, T.R., 2020. Data Privacy Regulations and Their Impact on Business Operations: A Global Perspective. *Journal of Business and Management Studies*, 2(1), pp.49-67.
- Yasiukovich, S. and Haddara, M., 2021. Social CRM in SMEs: A systematic literature review. *Procedia Computer Science*, 181, pp.535-544.