INFORMATION SYSTEMS

Managing Business Information-LCLM5004
Component 1- Group Presentation

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ABOUT TODAY'S PRESENTATION

- ✓ Introduction to Information Systems
- ✓ Importance in Business Operations
- ✓ Business lacking the Information System
- ✓ Types of Information Systems
- ✓ Information systems 1
- ✓ Information system 2
- ✓ Information System 3
- ✓ Comparison of Systems
- ✓ Ethical issues
- ✓ Case study
- ✓ Recommendations
- ✓ Conclusion
- ✓ References

INTRODUCTION TO INFORMATION SYSTEMS

What are Information Systems?

Information Systems is an integrated set of components for collecting, storing and processing data for providing information,kwnoldge and digital products. Businesses and companies depend on information system to carry put and manage their operations, interact with customers and suppliers and compete in the marketplace (Zwass,2022)

Example:
Retail companies use information systems to track inventory and customer purchased

Information Systems Combine:

- ❑ Technology
- ❑ People
- ❑ Processes
- ❑ Data

Purpose

They help Businesses:

- ❑ Improve efficiency
- ❑ Support decision making
- ❑ Enhance customer experience
- ❑ Gain competitive advantage

INFORMATION SYSTEMS

Components of Information Systems (Technical View)

- **Hardware**- Computers, servers, mobile devices
- **Software**-Programs and applications
- **Networks**-Internet, WI-FI, Cloud Services
- **People**- Employees, managers, IT staff
- **Processes**-Steps for collecting using data

These components work together to help a business run effectively.

(Roch et al,2022)

Sociotechnical view of Information Systems
Information Systems are made up of people and technology working together.

Business Goals-what the organisation wants to achieve
Data-Raw facts (sales figures)
Information-processed data used for decisions
Knwoeldge-understianding gained from information
Technology-Hardware ,software ,and networks

Success comes from combining technology with people and business goals.

(Morris, 2025)

THE YARN BASKET

The Yarn Basket would benefit from modern Information System such as CRM, POS, Inventory management ,E-commerce website and digital payment systems. These Systems would improve efficiency ,accuracy ,customer service ,stock control and business decision making whole supporting future business growth (Morris ,2025)

Information System Missing	Problem Addressed	Purpose
Inventory Management System	Difficulty in monitoring stock levels and avoiding shortages or overstocking	Tracks inventory in real time ,manages stock and supports reordering decisions
Customer Relationship Management (CRM)	Partial information about customers and their purchasing ways	Stores customer data ,manages communications and helps improve customer service and loyalty
Point Of Sales (POS)	Sales are processed manually ,a slow service and more possible errors to occur	Records sales transactions quickly and accurately ,generates receipts and track daily sales
E-commerce Website	Customers can only buy products in store	Enables online sales, expand market reach and provides 24,7 shopping access
Digital Payment System	Limited payment options for customers	Allow secure card and digital payments ,improving convince and increasing sales opportunities

Overview of the Yarn Basket:

The Yarn basket is a small independent wool and knitting shop.

The shop sells wool, knitting needles, crochet hooks and craft supplies

The shop at current time does not have any Information Systems

- The shop only accepts cash payments
- Sales are recorded manually in a notebook
- Stock levels are checked by hand
- The shop does not own a website for online orders
- Customer information is not stored

Current Situation Challenges

IMPORTNACE OF INFORMATION SYSTEMS

Why Businesses need them?

- Faster communication
- Improved productivity
- Better data management
- Reduced operational costs
- Accurate reporting

SLM (Self Learning Material) MBA, 2025)

Business Benefits:

- Real time decision-making
- Improved customer service
- Better strategic planning

TYPES OF INFORMATION SYSTEMS

CRM-Customer Relationship Management

A CRM is a software that helps manage customer data track interaction and drive business growth White C, Salesforce (2022)

TPS-Transaction Processing System

TPS is a computer System that helps record store and process everyday transactions fast and accurate. It collect and retrieves information about customers and business activities like sales and payments (Schneider and Smalley, 2024)

MIS- Management Information System

MIS is a system that gathers, processes and analyses company's data to support better business decision making. It helps organisations operate more efficiently and respond quickly to changes. (Staff, 2025)

CUSTOMER RELATIONSHIP MANAGEMENT

CRM systems manages customer data and interactions to improve relationship and sales (Sales force,2024)

- ✓ Enhances marketing strategies
- ✓ Increases sales
- ✓ Improves customer loyalty

Benefits

- It can be expensive
- Requires staff training
- Privacy concerns

Limitations

- Targeted promotions based on customer purchases
- Emails promotional offers
- Improves customer retention

Example: Nisa Local

TRANSACTION PROCESSING SYSTEM

A TSP records daily business transactions such as sales and payments(Britannica,2024).

- ✓ Fast and accurate processing
- ✓ Support daily operations
- ✓ Reduces human error

Benefits

- Staff training is required
- Internet connection required
- Only handles routine tasks

Limitations

- Sales recorded at checkout tills in real time
- Stock updates automatic
- Prints receipts

Example-Nisa Local

MIS produces reports for managers using data from business operations.(IBM,2024)

MIS-MANAGEMENT INFORMATION SYSTEM

- ✓ Provides clear reports
- ✓ Helps in planning and performance tracking
- ✓ Aids in decision making

Benefits

- Uses old data and may be outdated
- It has a maintenance and setting up cost

Limitations

- Weekly sales and stock reports for store managers
- Tracking monthly revenue and net

Example-Nisa Local

COMPARISON OF CRM,TPS AND MIS

How the systems work together:

In a business like **Nisa local**

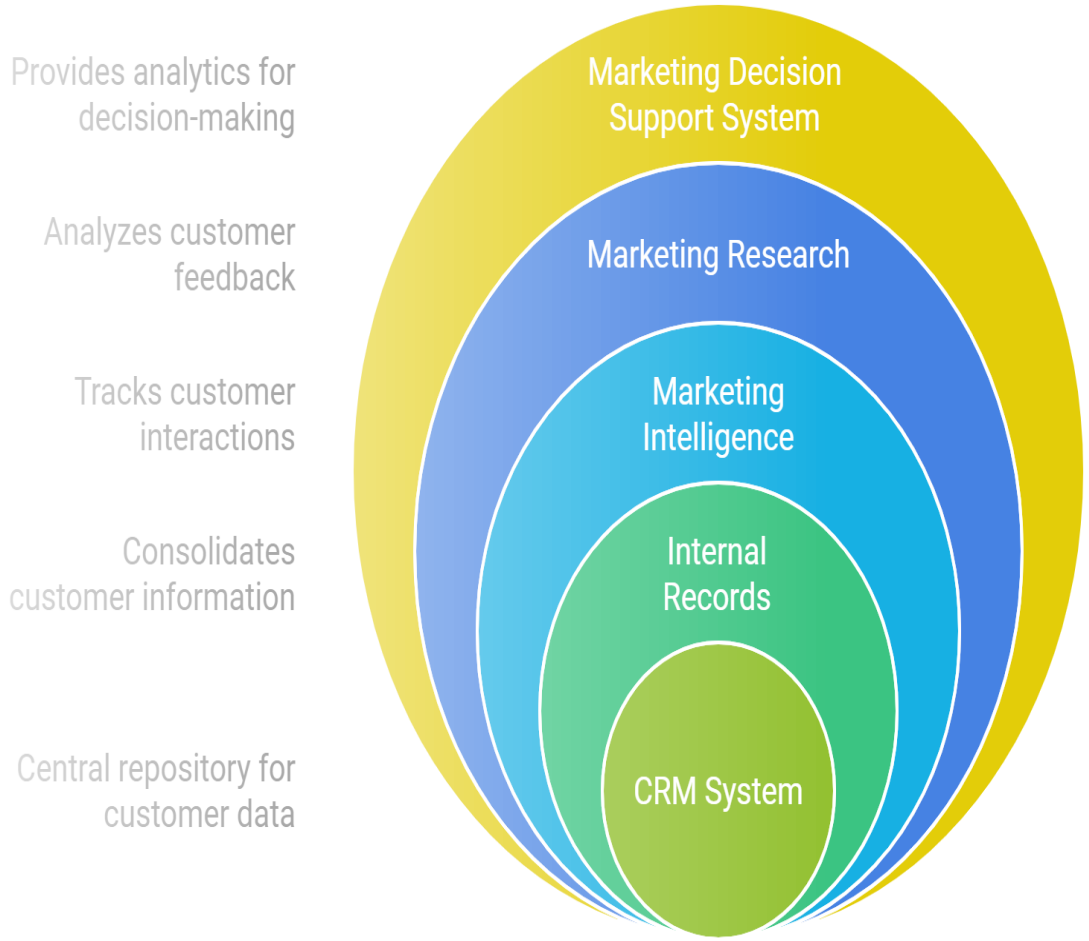
- ❑ CRM uses customer data for marketing
- ❑ TPS records sales
- ❑ MIS analyses sales data into reports

Therefore ,together they

- ❑ Improve efficiency
- ❑ Support decision making
- ❑ Aids in planning
- ❑ Increases customer satisfaction

Information System	Purpose	Strength	Weakness	Example
CRM	Manages customers	Improves loyalty and sales	Privacy risks	Promotions Loyalty programme
TPS	Records transactions	Fast and accurate	No analysis	Till system POS system
MIS	Produces reports	Supports decisions and aids planning	No real sales reports	Sales reports

CRM System Integration in MIS



ETHICAL CONSIDERATION IN INFORMATION SYSTEMS

Issue 1 Data Privacy risks- misuse of customer data

- Follow GDPR regulations and data protection laws
- Customer Data Protection

Issue 2 Lack of customer consent for data use

- Ensure clear consent forms and opt in systems

Issue 3 Employee monitoring concerns

- Being transparent and set clear monitoring policies

Issue 4 Cybersecurity threats (data leaks, hack)

- Use firewalls, encryption and regular system updates

Issue 5 Data accuracy and bias

- Regular review and verification of data is essential for a better performance

NISA LOCAL

A case study on how information system aids and improves customer satisfaction and business performance

Business Challenge

- Maintaining a consistent customer service
- Protect customer and business data
- Ensuring accurate sales tracking in real time
- Managing stock across many independent store

Ethical Consideration

- Customer data privacy (GDPR compliance required)
- Secure storage of sales and customer information
- Risk of misuse of customer purchasing data
- Need for transparency in data collection

Impact on Business Performance

- Improved stock control, and reduce waste through real time inventory tracking
- Faster and more accurate decision making through MIS reports
- Faster checkout and transactions processing using EPOS and TPS (Better operational efficiency across stores ,higher sales and customer satisfaction
- Reduced supply chain delays through SCM intergrading
- Increased customer loyalty through personalised offers

Key Takeaways: CRM,TPS and MIS work best when integrated
Ethical use is essential for trust and compliance. Also, all the Information systems they uses.
Information systems improve retail efficacy and decision making
Also, small businesses benefit from digital transformation (Stenhouse,2025)

Inventory Management System	Monitors stock levels and aids maintain the right inventory
Customer relationship management (CRM)	Stores customer information and supports loyalty and marketing activities
Electronic Point Of Sale (EPOS) System	Records sales, updates stock levels automatically and support pricing and promotions (EPOS System 1,000 added in 2024, (Leader,2024)
Transaction Processing System (TPS),	Processes daily sales transactions, payments and receipts at the checkout
Direct to Store (DTS) Online Ordering System	Allows retailers to order products from suppliers through a single online platform (In 2018 online ordering for customers was launched online). (Wells,2018)
Supply Chain Management (SCM)	Coordinates product sourcing, supplier relationships and deliveries
Management Information System (MIS)	Produces reports on sales, stock and business performance to support management decisions

RECOMMENDATIONS, NISA LOCAL

Improve integration between existing Information Systems-Allows real time data sharing between POS, Inventory ,CRM and supplier systems to improve operational efficiency and reduce data duplication.

Strengthen Cybersecurity training and controls-to reduce security risks by providing employees awareness training ,implementing stronger access control and protecting customer data

Expand Digital CRM and Loyalty Programmes-Increase customer retention and sales through personalised rewards and targeted marketing campaigns.

Introduce Real Time Business Intelligence Dashboards-Provide mangers with instant access to sales, inventory and customer insights to support faster and more effective decision making-

These improvements will increase efficiency and customer satisfaction

Solutions

- ✓ Improved inventory accuracy and stock availability
- ✓ Better organisation between business systems
- ✓ Enhanced customer engagement and loyalty
- ✓ Stronger protection of business and customer data
- ✓ Faster and more informed decision-making

CONCLUSION

TPS-manages daily transactions

CRM-strong customer relationship and satisfaction

MIS-valuable information for reports for managers

Support faster and better decision making

Enhance customer experience and more effectively

Improve efficiency and reduce errors

In conclusion Information Systems such as CRM,TPS and MIS are essential for modern retail businesses. As a result, by using information Systems responsibly and effectively businesses like Nisa Local can improve performance ,stay competitive and long-term customer trust.

(NI Business Info, 2012)

THANK YOU FOR LISTENING

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