

CONSULTING REPORT

Modernising Business Information Systems

Improving efficiency, decision-making and customer experience

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LCLM 5004 Managing Business Information (resist component 1)



Why Information Systems Matter

Information systems turn raw business data into decisions, speed and advantage.

Efficiency

Streamlined processes and fewer manual, error-prone tasks.

Better decisions

Reporting and analytics replace guesswork at every level.

Competitive advantage

Faster response to markets and customers than rivals.

Automation

Routine workflows run without human intervention.

Real-time data

Live visibility of stock, sales and operations.

Customer experience

Personalised, consistent and quicker service.

Information Systems Under Review

Three systems are assessed against the company's operational and strategic needs.

TPS

**Transaction Processing
System**

Captures and processes day-to-day business transactions.

MIS

**Management Information
System**

Summarises operational data into managerial reporting.

ERP

**Enterprise Resource
Planning**

Integrates all core functions on a single shared database.

PART ONE

System Analysis & Comparison

TPS – Transaction Processing System

The operational backbone that records every business transaction.

Daily transactions

Orders, payments, stock movements and payroll captured as they happen.

Fast and accurate

High-volume processing with strong data integrity controls.

Operational focus

Supports front-line staff and routine day-to-day activity.

LIMITATION

Low decision support

Produces data, not insight – no analysis, trends or forecasting for managers.

MIS – Management Information System

Converts transactional data into structured management reporting.

Managerial reports

Regular summaries of sales, cost and performance by area.

Dashboards and trends

KPIs tracked over time to spot patterns early.

Supports planning

Evidence base for budgeting and tactical decisions.

LIMITATION

Limited analytics

Depends on TPS data quality; weak on predictive and unstructured analysis.

ERP – Enterprise Resource Planning

A single integrated platform across finance, supply chain, HR and sales.

Full business integration

One shared database serving every department.

Removes data silos

Consistent information end to end across the business.

Real-time visibility

Live operational and financial position at any moment.

LIMITATION

High cost and complexity

Large investment, long implementation and significant change management.

Comparing TPS, MIS and ERP

Feature	TPS	MIS	ERP
Purpose	Operations	Reporting	Integration
Decision support	Low	Medium	High
Cost	Low	Medium	High
Complexity	Low	Medium	Very high
Strategic value	Low	Medium	Very high

RECOMMENDATION

Adopt ERP as the core platform, with MIS reporting layered on top for management insight.

PART TWO

Ethical Considerations

Ethical and Legal Risks

Modern systems concentrate personal and operational data, raising four core risks.

Data privacy

Customer and employee data must be collected lawfully, minimised and retained only as long as needed.

Security risks

Integrated platforms widen the attack surface; a single breach can expose the whole business.

AI bias

Automated decisions in pricing, recruitment or credit can replicate historic discrimination.

Employee monitoring

Productivity tracking risks eroding trust and breaching workers' reasonable expectations.

Mitigating the Risks

Responsible use depends on controls, governance and culture working together.

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|----|-------------------------------|--|
| 01 | GDPR compliance | Lawful basis, data minimisation, DPIAs and clear retention policies. |
| 02 | Encryption and MFA | Data protected in transit and at rest, with strong access control. |
| 03 | Bias testing | Regular auditing of algorithms with human oversight of decisions. |
| 04 | Transparent monitoring | Employees told what is tracked, why, and how it is used. |
| 05 | Staff training | Ongoing awareness so people are a defence, not a weak point. |

PART THREE

Real-World Case Studies

Amazon – ERP + AI-driven analytics



CHALLENGE

Operating at global scale with same-day delivery expectations.

SOLUTION

Integrated ERP with AI demand forecasting and warehouse automation.

ETHICS

Scrutiny over warehouse productivity monitoring and algorithmic management.

IMPACT

Lower fulfilment costs, faster delivery and higher customer satisfaction.

Tesco – MIS + CRM



CHALLENGE

Retaining customers and understanding shopping behaviour at scale.

SOLUTION

Clubcard loyalty data feeding MIS dashboards for buying and pricing.

ETHICS

Consumer concern over how loyalty data is collected, shared and used.

IMPACT

Stronger loyalty, sharper ranging decisions and reduced markdowns.

Zara — TPS + ERP



CHALLENGE

Fast-fashion cycles demanding weeks, not seasons, of lead time.

SOLUTION

Real-time store sales data linked to ERP-driven design and production.

ETHICS

Store and supply-chain monitoring plus wider sustainability scrutiny.

IMPACT

Rapid replenishment, less unsold stock and reduced waste.

Recommendations

A staged programme that delivers efficiency now and strategic capability next.

1 – Adopt ERP

Adopt ERP as the integrated core, phased by function to control cost and risk.

2 – Layer on MIS

Layer dashboards over ERP data so managers act on live insight.

3 – Secure the data

Encryption, MFA, access reviews and tested incident response.

4 – Use AI ethically

Bias testing, human oversight and transparency on automated decisions.

5 – Train the staff

Build capability and buy-in so adoption succeeds, not just installation.

Expected outcome

Higher efficiency, evidence-based decisions and a better customer experience.

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