



GROUP PRESENTATION ON BUSINESS MANAGEMENT INFORMATION

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Introduction

Apple Inc. was founded on April 1, 1976, by Steve Jobs, Steve Wozniak, and Ronald Wayne in Cupertino, California (Isaacson, 2011). Initially named Apple Computer Co., the company's mission was to make computing accessible to everyday users.

(Wozniak & Smith, 2006; Linzmayer, 2004).

MODERN INNOVATIONS

IMAC

POD AND ITUNES

IPHONES

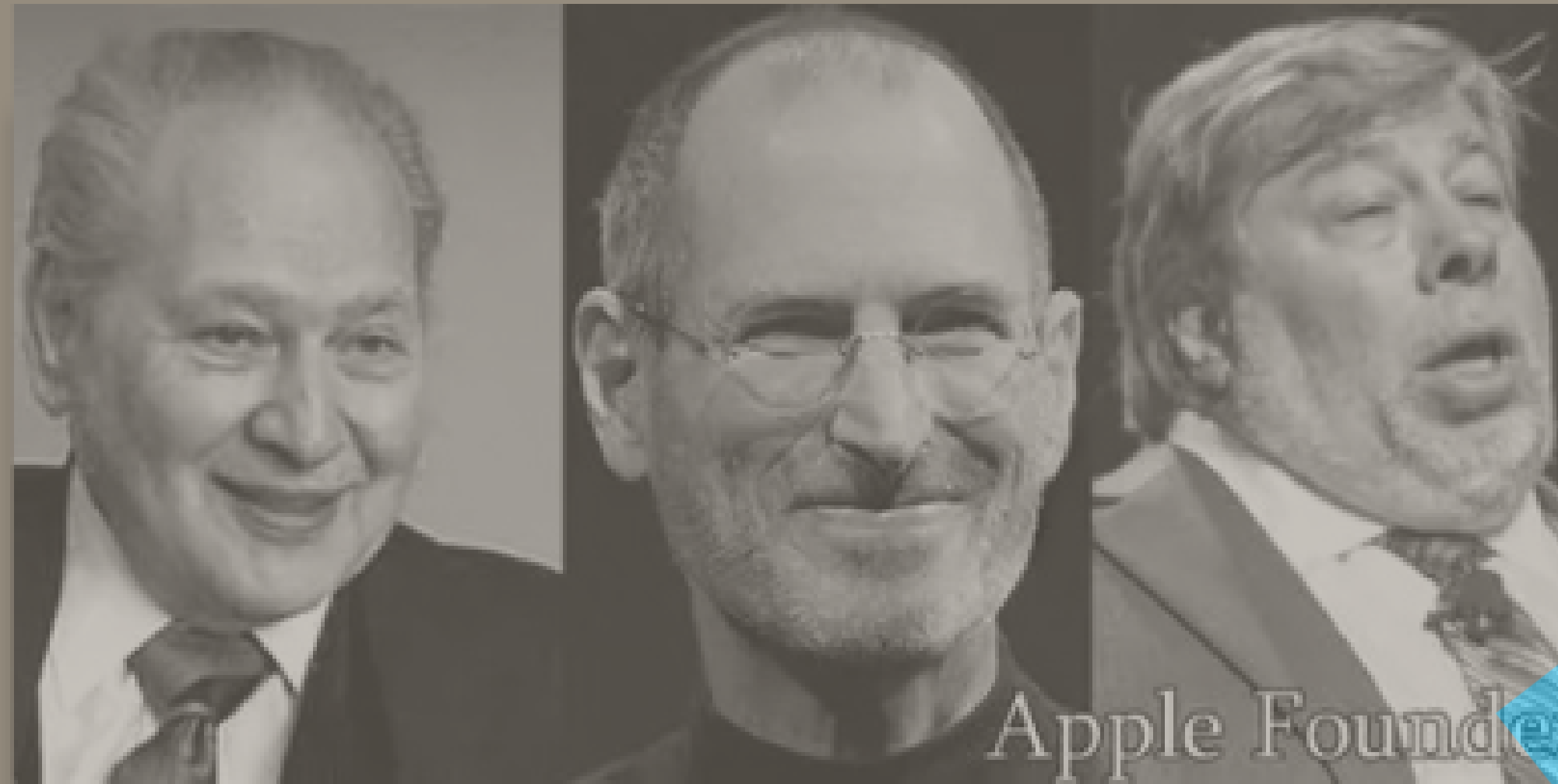
IPAD,APPLE WATCH AND
APPLE MUSIC

APPLE EARLY PRODUCTS

APPLE 1
(1976)-SINGLE- BOARD
COMPUTER DESIGNED BY
WOZNIAK

APPLE 2
(1977)MASS PRODUCED
MICROCOMPUTERS

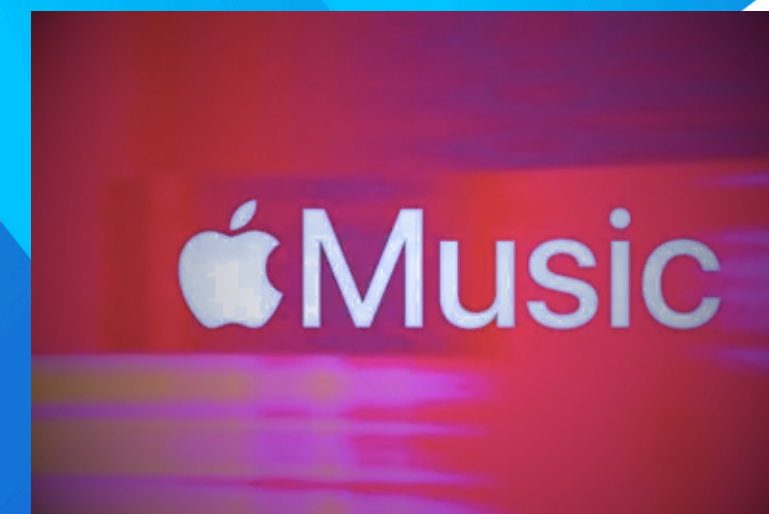
MACINTOSH
(1984) FIRST COMPUTER
WITH A GRAPHICAL USER
INTERFACE



RONALD WAYNE

STEVE JOBS

STEVE WOZNIAK



Information System (IS) is an integrated set of components that collects, processes and distributes data for decision-making.

Serving as the backbone of modern organisations, it enhances operational efficiency, enables strategic analysis and creates competitive advantages in the digital business environment.

SIX INFORMATION SYSTEMS

DBMS(Database Management System)
Is a software designed to efficiently store, retrieve, and ,manage data in a structure and organized manner.

AI(Artificial Intelligence)
Is the capability of computational systems to perform tasks typically associated with human intelligence, such as learning and REASONING

TPS(TRANSACTION PROCESSING SYSTEMS)

Used for processing transactions such as sales settlements, payroll, and routine business operations.

MIS(MANAGEMENT INFORMATION SYSTEM)

Is an information system used for decision making, and for coordination, control, analysis, and visualization of information in an organization.

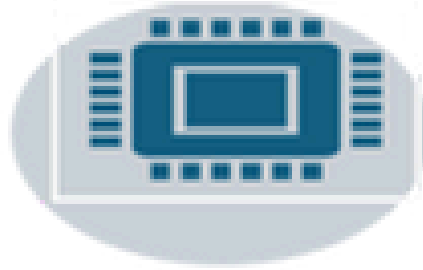
DSS(DECISION SUPPORT SYSTEM)

Is a computerized tool designed to assist organization and making informed decisions.

ESS(EXECUTIVES SUPPORT SYSTEM)

Is a computer-based system designed to provide senior executives with easy access to and analysis of data support decision making.

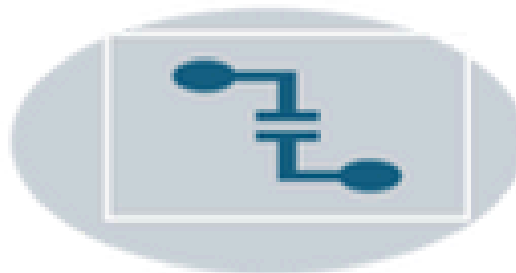
Strategic Values and Integration



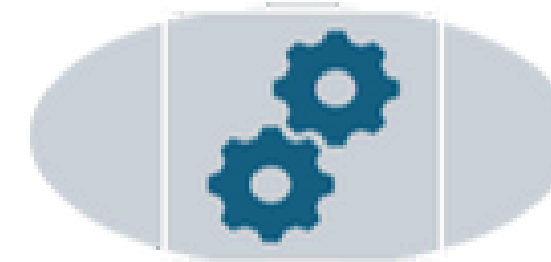
TPS: Backbone of operational efficiency; feeds data into MIS and DBMS.



DBMS: Foundational layer; supports all other systems by managing data integrity and access.



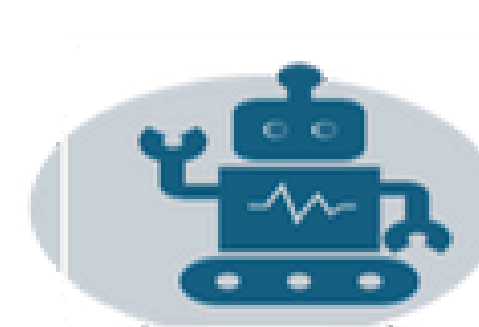
MIS: Translates operational data into managerial insights; bridges TPS and DSS.



DSS: Enhances decision quality through simulations, “what-if” analysis, and forecasting.



ESS: Provides high-level summaries and trends for strategic planning and executive oversight.



AI: Cross-cutting enabler; enhances all systems with automation, pattern recognition, and intelligent decision-making.

BOURGEOIS ET AL. (2019) EMPHASIZE THAT INFORMATION SYSTEMS ARE ESSENTIAL FOR SUPPORTING BUSINESS OPERATIONS AND STRATEGIC DECISION-MAKING.

Information Systems	Key Features
Transaction Processing System (TPS)	- Real-time and batch processing, High accuracy and reliability - Handles large Volumes, Ensure data Integrity. - Generates receipts and reports
Database Management System (DBMS)	- Centralized data storage, specializing in data definition and data manipulation - Query processing (e.g., SQL), Access control, and security - Backup and recovery mechanisms
Management Information System (MIS)	- Summarized reporting, Periodic and ad hoc reports - Supports middle management - Integrates data from TPS and DBMS - Facilitates performance monitoring
Decision Support System (DSS)	- Analytical Modeling (e.g., simulations, forecasting) - Interactive user surface, supports semi-structured decisions - Combines internal and external data
Executive Support System (ESS)	- Visual dashboards and KPIs, Drill-down capabilities, Real-time strategic insight - Simplified interface for executives, Integrates with DSS and external data sources
Artificial Intelligence (AI)	- Machine learning and pattern recognition - Adaptive and autonomous decision-making - Enhances other systems - Handles structured and unstructured data

Key Features of the Information Systems

INFORMATION SYSTEMS PLAY A CRITICAL ROLE IN ORGANIZATIONAL SUCCESS (BOURGEOIS ET AL., 2019)

Analytics Table

Systems	Purpose	User level	Decision type	Data type	Examples
TPS	Records routine transactions	Operational	Structured	Real-time	POS, Payroll
DBMS	Manages Structured data	All levels	N/A	Structured	Inventory, Integration
MIS	Summarizes data for managers	Middle	Semi-structured	Aggregated	Budget reports
DSS	Supports complex decisions	Analysts	Unstructured	Analytical	Forecasting
ESS	Strategic dashboards	Executives	Strategic	Visual	KPI trends
AI	Stimulates Intelligence	All levels	Adaptive	Mixed	Chatbots, Voice assistant, Diagnostic



Functional Comparison

Features	TPS	DBMS	MIS	DSS	ESS	AI
Automation	High	Moderate	High	High	High	Very High
Decision Support	Indirect	Indirect	Direct	Direct	Direct	Direct
Real-time	Yes	Yes	Sometimes	Sometimes	Yes	Yes
Interface	Forms	Queries	Reports	Models	Dashboards	Conversational

Laudon and Laudon (2012) argue that Management Information Systems play a critical role in supporting managerial decision-making and organizational efficiency

ETHICAL ISSUES IN APPLE

GLOBAL INFLUENCE – GLOBAL RESPONSIBILITY
INNOVATION WITH ETHICAL PRESSURE
PROFIT VS PRINCIPLES TRUST IS APPLE'S BIGGEST ASSET

"THEY BASE THEIR SUCCESS ON CREATING INNOVATIVE HIGH-QUALITY PRODUCTS AND ON DEMONSTRATING INTEGRITY IN EVERY BUSINESS INTERACTION "(AUBURN UNIVERSITY,2021)



DATA PRIVACY & USER TRACKING

COLLECTS USER DATA TO "IMPROVE EXPERIENCE "

TRACKING CONNECTS USERS TO APPLE ECOSYSTEM

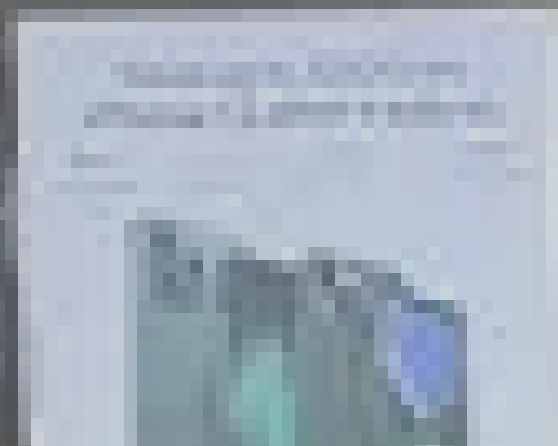
ENCRYPTION PROTECTS ,BUT TRANSPARENCY IS LIMITED

DATA IS POWER AND POWER REQUIRES RESPONSIBILITY

(APPLE, 2022)



Apple data protection system follows GDPR (europe) and CCPA(california) use on-device processing to keep data private publishes transparency reports about data requests belives privacy is a human right





Real-world

- Transaction Processing System (TPS) – Amazon**
 - Use:** Manages millions of real-time transactions for orders, payments, and logistics.
 - Challenges:** High transaction volumes strain infrastructure; latency affects customer experience.
 - Solutions:** Scalable cloud architecture (AWS), microservices, and real-time monitoring.
 - Ethical Issues:** Data privacy in payment processing; ensuring secure handling of customer financial data.

Decision Support System (DSS) – Google

- Use:** Supports ad pricing, cloud resource allocation, and strategic planning.
- Challenges:** Data overload, model bias, and over-reliance on algorithms.
- Solutions:** AI-enhanced DSS, human-in-the-loop validation, and scenario Modeling.
- Ethical Issues:** Algorithmic bias in ad targeting; transparency in automated decisions.

Executive Support System (ESS) – Starbucks

- Use:** Provides executives with dashboards on global performance, sustainability, and customer trends.
- Challenges:** Data visualization complexity; aligning KPIs across markets.
- Solutions:** Custom ESS platforms with drill-down features and predictive analytics.
- Ethical Issues:** Executive decisions based on incomplete or biased data can affect stakeholders.

Database Management System (DBMS) – JPMorgan Chase

Use: Stores and manages sensitive financial data across global branches.

Challenges: Data security, regulatory compliance, and scalability.

Solutions: Encrypted databases, role-based access, and hybrid cloud deployment.

Ethical Issues: Risk of data breaches; ethical handling of customer financial records.



Artificial Intelligence (AI) – Microsoft

Use: Powers Copilot, Azure AI, and enterprise automation.

Challenges: Scaling AI value, workforce displacement, and ethical governance

Solutions: Responsible AI frameworks, explainable models, and employee reskilling.

Ethical Issues: Job automation, data ethics, and algorithmic accountability.

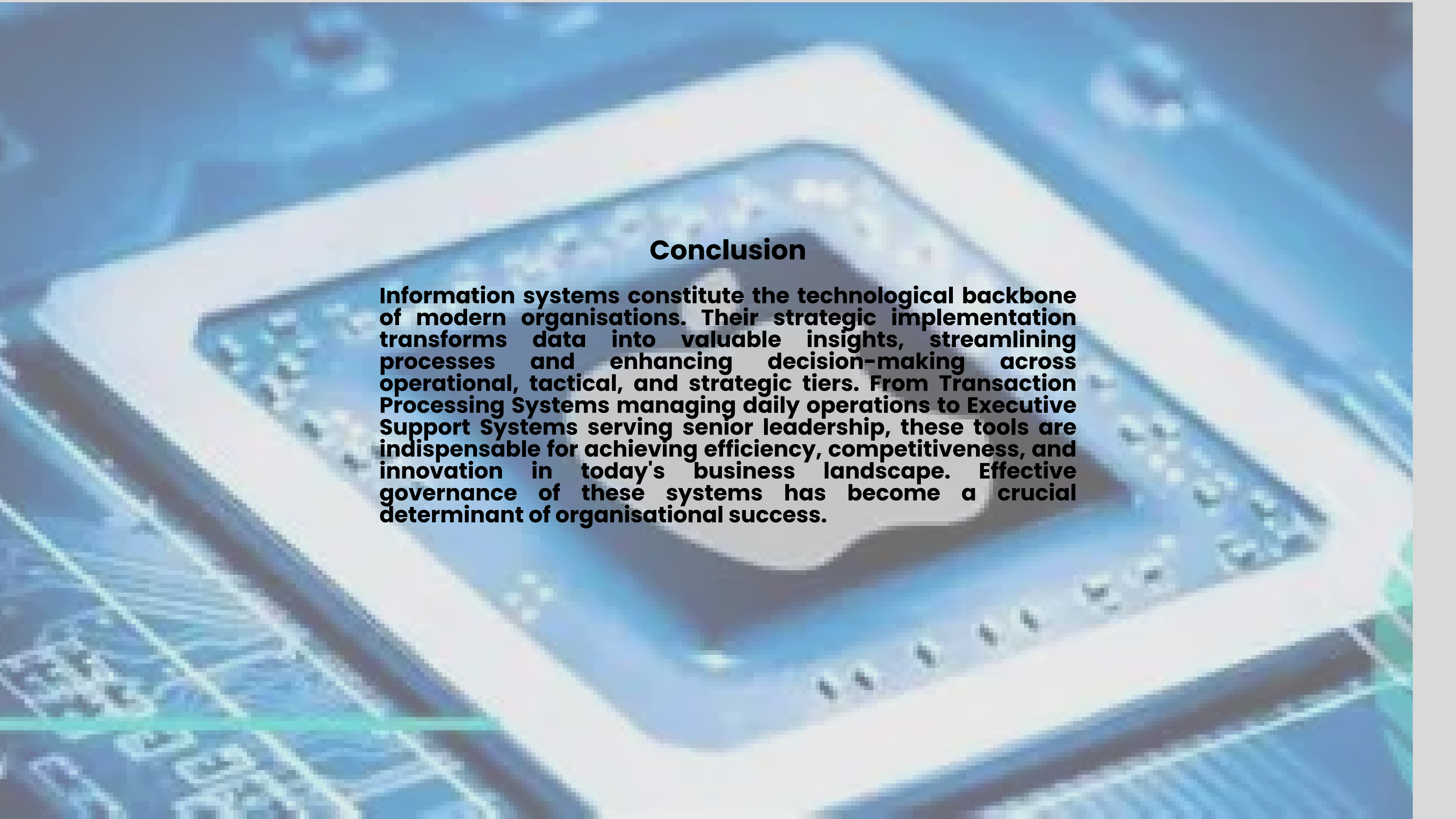
Management Information System (MIS) – Apple Inc.

Use: Tracks sales performance, supply chain metrics, and product lifecycle data.

Challenges: Integrating data across global units; ensuring timely reporting.

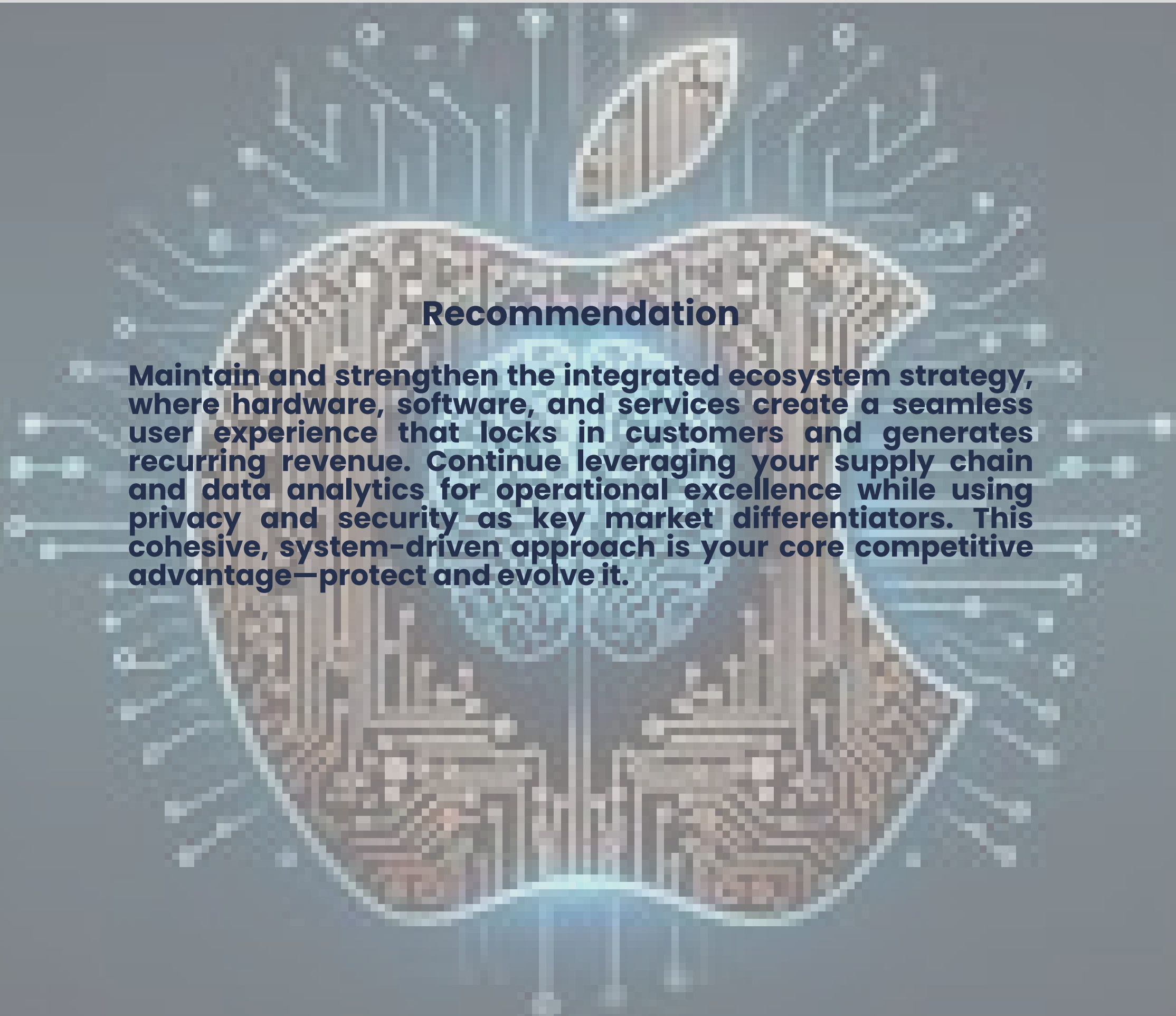
Solutions: ERP integration, automated reporting tools, and centralized dashboards.

Ethical Issues: Transparency in supply chain reporting; ethical sourcing of materials.



Conclusion

Information systems constitute the technological backbone of modern organisations. Their strategic implementation transforms data into valuable insights, streamlining processes and enhancing decision-making across operational, tactical, and strategic tiers. From Transaction Processing Systems managing daily operations to Executive Support Systems serving senior leadership, these tools are indispensable for achieving efficiency, competitiveness, and innovation in today's business landscape. Effective governance of these systems has become a crucial determinant of organisational success.



Recommendation

Maintain and strengthen the integrated ecosystem strategy, where hardware, software, and services create a seamless user experience that locks in customers and generates recurring revenue. Continue leveraging your supply chain and data analytics for operational excellence while using privacy and security as key market differentiators. This cohesive, system-driven approach is your core competitive advantage—protect and evolve it.

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Thank You

Any Question