• Name: _____

• Date: _____

• Section: _____

BUSN 315: Management Information Systems

Quiz #1: Suggested Solutions

Spring 2026

INSTRUCTIONS:

• Write your name, date, and section clearly at the top of the first page.

• This is a closed-book quiz. Do not use your textbook, class notes, or electronic devices.

• The quiz consists of four parts: Definitions, True / False, Multiple Choice, and Short Answers.

• For definitions, write in complete sentences. Limit each definition to at most three sentences.

• For multiple-choice questions, circle the single best answer. Only one option is correct.

• For short-answer questions, write your responses in complete sentences. Limit each response to at most five sentences.

• You have 75 minutes to complete the quiz. Manage your time carefully.

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Problem 1. Definitions   (5 Points Each)

Select <u>FOUR</u> items from the list below, and provide a definition for each item you choose.

- Information System (IS)
- Knowledge Management System (KMS)
- Complementary Assets
- Transaction Processing System (TPS)
- Social Business
- Customer Relationship Management (CRM) System

- Information System (IS):
  An information system is a set of interrelated components that collect, process, store, and distribute information to support decision making, coordination, and control within an organization. It transforms raw data into meaningful information that users can apply to business activities.

- Complementary Assets:
  Complementary assets are organizational, managerial, and social factors that must exist alongside information technology for it to create value. These include supportive culture, appropriate business processes, management practices, and employee skills.

- Social Business:
  A social business uses social networking technologies to support collaboration, communication, and knowledge sharing among employees, customers, or partners. The goal is to improve problem solving, coordination, and organizational performance rather than simply automate tasks.

- Knowledge Management System (KMS):
  A knowledge management system is designed to capture, store, organize, and share knowledge and expertise within an organization. It supports learning and decision making by making both documented information and employee expertise more accessible.

- Transaction Processing System (TPS):
  A transaction processing system records and processes routine, day-to-day business transactions such as sales, payments, and payroll. It provides the basic data needed for operational activities and for higher-level information systems.

- Customer Relationship Management (CRM) System:
  A customer relationship management system centralizes customer data across sales, marketing, and service functions. It helps organizations manage customer interactions, improve service, and build long-term relationships.

Problem 2. True / False (5 Points Each)

Determine whether each statement is TRUE or FALSE. If FALSE, justify briefly.

2.A. Data and information are interchangeable terms, since both are used directly in managerial decision making.

- FALSE
  Data are raw, unprocessed facts, while information is data that have been processed and organized to be meaningful and useful for decision making. Managers rely on information, not raw data, when making decisions.

2.B. Collaboration tools primarily increase organizational value by enabling faster and more frequent communication among employees.

- TRUE

2.C. Enterprise applications are designed to integrate processes and data across multiple functional areas of a firm.

- TRUE

2.D. Investing heavily in information technology guarantees higher returns, regardless of organizational practices or culture.

- FALSE
  Information technology alone does not guarantee higher returns. Organizational factors such as business processes, management practices, culture, and complementary assets are necessary for IT investments to create value.

Problem 3. Multiple Choice   **(4 Points Each)**

3.A. Which of the following best describes data?

   a) Raw, unprocessed facts that are not immediately useful in decision making

   b) Processed facts that provide insight useful for decision making

   c) Undocumented experience and expertise within an organization

   d) A routine report generated for middle management

3.B. Which of the following is an example of a managerial complementary asset?

   a) Strong support from senior management for IS adoption

   b) High-speed servers that increase computing capacity

   c) Barcode scanners used at retail checkout counters

   d) Cloud storage that enables file sharing across locations

3.C. Why do returns on IT investments vary widely across firms?

   a) Returns are determined primarily by employee age and tenure

   b) Most firms purchase different brands of hardware and software

   c) IT investments always generate the same returns over time

   d) Returns depend on complementary assets such as supportive culture, processes, and management practices

3.D. Which of the following best describes information system literacy?

   a) Knowing how to use common productivity software such as spreadsheets

   b) Knowledge of how computer hardware works and how to install software

   c) The ability to write computer programs in multiple languages

   d) A broader understanding of information systems that includes organizational, managerial, and technical aspects

Problem 3. Multiple Choice (continued)   (4 Points Each)

3.E. Which type of knowledge is undocumented and experience-based?

   a) Explicit knowledge

   b) Structured knowledge

   c) Processed information

   d) Tacit knowledge

3.F. A system designed to centralize customer data across sales, marketing, and service is a:

   a) Enterprise Resource Planning (ERP) system

   b) Customer Relationship Management (CRM) system

   c) Supply Chain Management (SCM) system

   d) Transaction Processing System (TPS)

3.G. Information systems can improve business processes by:

   a) Guaranteeing higher profits regardless of how the organization operates

   b) Ensuring every manager uses the same system in the same way

   c) Changing the flow of information among participants

   d) Eliminating the need for coordination across departments

3.H. Which situation best reflects the idea of a social business?

   a) A firm automates payroll to reduce clerical work

   b) Employees use internal social networking tools to share ideas and solve problems

   c) Managers rely exclusively on financial reports for decisions

   d) A company replaces human judgment with automated rules

Problem 4. Short Answers   **(9 Points Each)**

A regional retail company operates 25 stores across the Midwest. Every day, each store records thousands of transactions at checkout, including product ID, price, quantity sold, and time of purchase. These transactions are automatically stored in a central database. At the end of each week, store managers receive standardized reports summarizing total sales, inventory levels, and stockouts by product category. Recently, senior management has begun asking questions such as: "What happens to profit if we reduce prices on slow-moving items?" and "How would demand change if we delayed a planned promotion by one month?"

4.A. What type of information system records the checkout transactions described in the scenario? Why?

- Transaction Processing System (TPS)
  A Transaction Processing System (TPS) records routine, day-to-day business transactions such as sales at checkout. In this scenario, the system captures product ID, price, quantity, and time of purchase for each transaction, which is the core function of a TPS.

4.B. What type of information system generates the weekly sales and inventory reports? Who primarily uses this information?

- Management Information System (MIS)
- Middle managers

4.C. What type of system would be most appropriate for answering the 'what-if' questions raised by senior management? Explain your reasoning.

- Decision Support System (DSS)
  A Decision Support System (DSS) is most appropriate because it is designed to support non-routine decision making and answer "what-if" questions. DSS allows senior management to analyze alternative scenarios, such as price changes or delayed promotions, using data from multiple sources.

- Original Score: _____   - Recovered Score: _____

- Original Date: _____   - Recovered Date: _____