CONCORDIA COLLEGE
MOORHEAD, MINNESOTA

BUSN 315: Management Information Systems

Quiz #3

Fall 2025

INSTRUCTIONS:

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

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

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

- For definitions, write in complete sentences. Limit each definition to 3 sentences.

- For True/False questions, write TRUE or FALSE. If the statement is FALSE, provide a brief one- to two-sentence justification.

- 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 your response to 5 sentences or fewer.

- The total time allowed is 75 minutes. Manage your time carefully.

Problem 1. Definitions   **(5 Points Each)**

Select <u>FOUR</u> items from the list below and provide a concise definition that a manager could use when making a decision.

- Data Redundancy

- Domain Name System

- NoSQL

- Sentiment Analysis

- Search Engine Optimization

- Data Mart

- Data Redundancy:
  Storing the same data in more than one place. This often causes inconsistencies between versions. It also increases effort when updating or reconciling information.

- Domain Name System (DNS):
  A system that converts readable web names into numerical IP addresses. This allows users to access websites using simple names. DNS is essential for directing internet traffic.

- NoSQL:
  A database approach that does not rely on traditional tables. It can store large or fast-changing data in flexible formats. It is useful for unstructured information.

- Sentiment Analysis:
  A technique that identifies the emotional tone of written text. It helps classify feedback as positive, negative, or neutral. Organizations use it to understand customer opinions.

- Search Engine Optimization (SEO):
  Methods for improving how easily a website appears in search results. SEO increases visibility by improving relevance and technical performance. Higher visibility brings more visitors.

- Data Mart:
  A small, focused subset of a larger data repository. It serves the needs of one department or function. Data marts make targeted analysis faster and easier.

Problem 2. True / False   **(5 Points Each)**

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

2.A. Centralizing operational data reduces reconciliation effort and speeds companywide reporting.

   • TRUE

2.B. Unified communications improves responsiveness in hybrid teams by consolidating tools in one interface.

   • TRUE

2.C. A VPN is primarily used to increase Internet speed for video meetings.

   • FALSE
   • A VPN's primary function is to protect security and privacy.

2.D. IPv6 expands the address space available to connected devices compared to IPv4.

   • TRUE

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

3.A. A manager wants consistent, company-wide definitions of key metrics. Which initiative addresses this need first?

   a) Blockchain

   b) Data Governance

   c) NoSQL

   d) In-Memory Computing

3.B. Which scenario best illustrates a data quality problem rather than a technology failure?

   a) Firewall misconfiguration

   b) Slow Wi-Fi connection

   c) Server downtime

   d) Outdated customer addresses in CRM

3.C. A startup with fast-changing user activity data and global traffic should prioritize:

   a) NoSQL on a cloud provider for flexible scaling

   b) Paper forms digitized monthly

   c) On-premises mainframe with fixed schema

   d) Single-user desktop database for low cost

3.D. A firm's managers request live inventory visibility for every store. What technology most directly supports that goal?

   a) Email reports

   b) Data Mart

   c) Distributed cloud database

   d) Paper forms

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

3.E. When an AI system classifies invoices and flags unusual amounts, its function relates to:

     a) Program–Data Dependence

     b) Data Governance

     c) Data Integration

     d) Data Quality Assurance

3.F. Which metric would best demonstrate the value of Unified Communications for customer support?

     a) Hardware cost per unit

     b) Average resolution time

     c) Number of routers installed

     d) Monthly server uptime

3.G. A hotel chain wants to monitor recurring guest complaints from surveys and chats. Which approach is the best fit?

     a) Packet routing on core switches

     b) IPv6 deployment

     c) Text mining and sentiment analysis

     d) Tape backups for records retention

3.H. When an e-commerce site resolves `www.example.com` to an IP and loads the page, which part of the stack provides name resolution?

     a) VoIP

     b) VPN

     c) HTML

     d) DNS

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

3.I. A remote sales team needs secure access to internal dashboards while traveling. Which option is most appropriate?

     a) SMS text for all numbers

     b) VPN to the corporate network

     c) Unencrypted email attachments

     d) Public Wi-Fi with open credentials

3.J. Managers debating Internet of Things (IoT) investments should focus mainly on:

     a) Sensor data security and integration with existing databases

     b) Employee payroll automation

     c) Office printer replacement

     d) Digital marketing spend

Problem 4. Short Answer   **(10 Points Each)**

4.A. You are choosing between a centralized enterprise database and departmental spreadsheets for inventory. Describe one efficiency gain from centralization and one organizational risk if you remain with spreadsheets.

- A centralized enterprise database improves efficiency because it prevents data redundancy and inconsistency. Storing information in one managed system allows every department to work with the same definitions and values, which reduces errors and the need for reconciliation. Centralization also supports more reliable reporting and faster access to information.

- If the organization continues using separate spreadsheets, different teams may create conflicting versions of the same data. This can lead to inaccurate reports, poor coordination, and delays in decision making.

4.B. Your firm is piloting VoIP and Unified Communications. Identify one customer-experience metric that could improve and one managerial control you would implement to measure the impact.

- One customer experience metric that can improve is call wait time, since VoIP systems can route calls more efficiently and allow managers to monitor performance in real time. Unified Communications can also help employees respond more quickly by bringing together chat, voice, video, and presence indicators in a single place.

- A useful managerial control is the use of call analytics, such as tracking call volume, wait time, and the number of calls resolved. These metrics allow managers to compare performance before and after adopting VoIP and Unified Communications.

- Original Score: _____

- Original Date: _____

- Recovered Score: _____

- Recovered Date: _____