### **Scenario Analysis No 1:**

**1 (a)**

As a logistics manager in a global retail company, Supply Chain Management (SCM) systems are crucial for optimizing operations. SCM systems are a type of enterprise application designed to support organization-wide process coordination and integration. They involve the close linkage and coordination of activities in buying, making, and moving products. SCM integrates the logistics time of suppliers, manufacturers, distributors, and customers. This integrated approach helps reduce time, redundant effort, and inventory costs W2.

Specifically, SCM systems optimize **inventory tracking** and **supplier coordination** in several ways:

* **Inventory Tracking:** SCM data helps companies decide when and what to manufacture, store, and move. They allow inventory availability and level monitoring. RFID tags can track goods in a supply chain and components in real time, improving efficiency and cutting costs W5.
* **Supplier Coordination:** Suppliers and customers use SCM systems to buy materials and distribute finished goods. They help vendors receive orders and design modifications quickly. Wal-Mart links client purchases to suppliers in near real time via SCM systems W3.

Various systems improve **order fulfillment** and **warehouse management**:

* **Supply Chain Management (SCM) Systems:** These technologies help fulfill orders by quickly communicating and tracking shipments. They help warehouse management by providing information to store and move items and check inventory levels W2.
* **Enterprise Systems (ERP):** Enterprise Resource Planning solutions provide a single information system for organization-wide coordination. Order fulfillment and integrated warehouse operations require continuous information flow between manufacturing, accounting, and logistics W2.
* **RFID Technologies:** As mentioned, these can track goods within the supply chain, which is vital for both inventory management within a warehouse and tracking items through the order fulfillment process W5.

**1 (b)**

* **Information Quality Issues:** Bad data in supply chain management causes inventory problems, shipment delays, and increased expenses. Due to input errors or system redundancies, efficiency and profitability decrease. Data cleanup is crucial.
* **Security Vulnerabilities and Downtime:** Information system security flaws expose global supply chains to malware, hacking, DoS assaults, and internal threats. Delays, legal concerns, and financial losses result from breaches in order processing, inventory monitoring, and coordination.
* **Organizational Resistance to Change:** SCM system implementation or reconfiguration sometimes requires major business changes. Strong organizational forces can resist change, limiting system uptake and use. This resistance can slow SCM efficiency gains, affecting delivery times and profitability.
* **Complexity of Interorganizational Systems:** Managing application networks across numerous business partners in a global supply chain is difficult. System integration, partner technical capabilities, and cross-organizational process coordination can cause friction and disruptions in products and information flow.

**Scenario Analysis No 2:**

**2(a)**

Research directors in IT companies use KM systems to innovate and share expertise. KM improves decision-making and efficiency by creating, collecting, sharing, and using knowledge. Individual insights become business assets, promoting organisational learning and innovation. Effective KM adapts business processes to new data and experience, keeping organisations competitive. Knowledge workers provide insights, advise, and drive change in tech companies. For KM to succeed, organisations require systems that support knowledge acquisition, storage, sharing, and application to make knowledge accessible and actionable across the organisation.

**Systems supporting knowledge repositories** store different types of organizational knowledge:

* **Structured Knowledge Systems**, also known as content management systems, are repositories for formal, structured text documents, reports, and presentations. These require a database schema and document tagging and are useful for storing things like case reports or technical databases.
* **Semi-structured Knowledge Systems**, or digital asset management systems, handle less-structured documents such as email, voicemail, chat exchanges, videos, and images. These systems often use a taxonomy for classifying information and tagging for easy retrieval.

**Employee collaboration tools** are vital for sharing tacit (undocumented) and explicit (documented) knowledge.

* Expertise location systems, also known as Knowledge Network Systems, help gather and organize information that cannot be written down. They provide access to expert directories, in-house solutions, best practices and FAQs and support building communities of practice**.**
* Enterprise Knowledge Portals include both internal and external information sources for employees. Often, they depend on email, chat, discussion groups and videoconferencing for clear communication and knowledge sharing.
* LMSs are used to manage, distribute, monitor and evaluate employee training. They assist with learning in classrooms and integrate with different tools to show the positive impacts of training.

**2 (b)**

* **Insufficient resources:** Proper information structure and update resources may not be available in knowledge repositories. Essential data may be lost or become out of date.
* **Poor quality and high variability of content quality:** When there are no good validation steps, the final product may be inconsistent and of poor quality. Employees often have trouble accepting and benefiting from shared knowledge.
* **Content in repositories lacks context:** Because the context is missing, understanding and applying these records can be tough. Understanding something usually depends on the circumstances or setting.
* **Employees are not rewarded for contributing:** When rewarding contributions is not part of the culture, some employees stay quiet. Sharing important information at work can also cause employees to feel nervous.
* **Search engines return too much information:** When a taxonomy is missing, searches may produce too many results to be practical. Individuals cannot always locate useful information or expertise which makes working with existing knowledge difficult.

### **Scenario Analysis No 3:**

**3 (a)**

Decision Support Systems (DSS) help bank risk managers make complex decisions like fraud detection and credit risk assessments. Interactive computer-based DSS solve semi-structured and unstructured problems. Management Information Systems (MIS) focus on organized problems with fixed reports, but DSS emphasize models, assumptions, ad-hoc queries, and visualizations to help choices.

Model-driven or data-driven DSS. Data-driven DSS interface with big data pools in enterprise systems and Web sites to help users make decisions by extracting useful information. Banks need this to analyse huge transaction and customer data.

**Specifically, DSS assist in fraud detection and credit risk analysis through their analytical capabilities:**

* **Data Analysis and Pattern Identification:** DSS use Business Intelligence tools to examine company data and turn it into actionable information. Using data mining, OLAP and reporting, analysts can find patterns in historical data and predict fraud and missed payments.
* **Predictive Analytics:** With data mining, you can look for patterns that help decide the likelihood of a borrower repaying their credit. Like the brain, neural networks find connections in data and predictive analytics use these connections to spot fraud and danger.
* **Modeling and Scenario Analysis:** Risk managers can use Model-driven DSS to simulate various situations and understand how policies or the economy will be impacted. When combined with adaptive interfaces, they work particularly well for preventing fraud and credit risk.

**Various systems enhance predictive analytics and loan approvals:**

* **Data Warehouses and Data Marts:** These centralize current and historical data from numerous sources. A data warehouse organizes and standardizes data for predictive analytics and credit risk assessment. Specific user groups are targeted by data marts.
* **Analytical Platforms:** Preconfigured hardware-software solutions for performing queries and analysing massive data collections. Advanced predictive models require intense computations; thus, they use relational and non-relational technology.
* **Data Mining Tools:** These tools find patterns, sequences, classifications, clusters, and forecasts in data. This powers predictive analytics for risk assessment and fraud detection.
* **Neural Networks and other Intelligent Techniques:** Neural networks excel in identifying complicated patterns in big data sets for predictive modelling. Other intelligent methods like Case-Based Reasoning (CBR), which applies solutions from similar instances, could inform loan approval choices based on similar applicants' past loan results.

The business value of DSS includes providing fine-grained information for decisions that enable a firm to coordinate internal and external business processes more precisely. This contributes directly to profitability, which is essential in a banking environment managing risk.

**3 (b)**

As a manager, several factors could **limit the effectiveness of DSS tools**, potentially leading to incorrect risk assessments and significant financial losses for a banking institution. These challenges, as identified in the sources, include:

* **Information Quality Issues:** Low quality in data can decrease the efficiency of both CRM and DSS. DSS depends on data that is accurate, complete, valid, timely and accessible. When data is not unique or complete, it can result in risky loans or opportunities being ignored.
* **Management Filters:** The way managers think or decide can reduce the effectiveness of DSS. Sometimes, managers choose options that go against the system’s advice, even if data and technology are accurate.
* **Organizational Inertia and Resistance:** Forces within organizations sometimes work against changes. DSS that combine data from different departments (credit, collections, customer support) may call for changes in how tasks are handled. Objecting to these changes can restrict the role of the DSS and put its effectiveness in risk assessment in doubt.
* **Complexity of Integration and Systems:** Information from various systems is used by DSS, though linking all these systems together isn’t always straightforward. Not properly integrating data can lead to inaccurate understanding of risks because the collection is incomplete.
* **Security Vulnerabilities and Downtime:** When security is insufficient, the system may stop working or be vulnerable to data breaches. This can slow down risk assessments, cause financial trouble and create legal issues.

**Scenario Analysis No 4:**

**4 (a)**

As CEO of either Executive assistance Systems (ESS) or Executive Information Systems (EIS), I count on high-level support for decision making. ESS are created for senior managers to solve important organisational issues. They want to secure the CEO’s involvement in every area of business.

ESS gathers and connects information from various parts of the company so managers can choose, get and set up the data they need. They prefer to store info with others on the web and not take up space with giant files. Systems offer forecasts and allow for data analysis, comparison and the detection of patterns. Because the data is displayed clearly, users can make improved choices. We can implement “sense-and-respond” if data is readily available.

Revenue forecasting, performance appraisal, and market expansion strategies are assisted by various technologies:

* **Executive Support Systems (ESS):** By using aggregated data, ESS supplies forecasts directly to senior management to help with revenue projections. Analysing trends helps greatly when making predictions about the future.
* **Digital Dashboards and Balanced Scorecard Systems:** Such tools are recognized as important for tracking a company’s achievements in ESS. Performance indicators are shown in visual form using Digital Dashboards, helping with the review of performance.
* **Competitive Intelligence Systems:** Integrated With ESS, these systems give information about what’s happening externally. Included in global strategy is sharing worldwide shopping patterns, as this guides the company in choosing where to expand and delivering new products on time for customers to buy.
* **Modeling and Analysis Tools:** The framework makes use of these tools to examine different options and understand how they may affect strategic actions like going into new markets.

**4(b)**

As a manager, there are several things that could lead to misreading data, which in turn affects the company's strategy and ability to compete. These challenges are often related to problems in decision making in the real world:

* **Information Quality:** Poor data makes it tough to make decisions. If the data is inconsistent, incomplete, lacking or arrives too late, market or business decisions could be wrong. Outdated sales information may cause executives to ignore new obstacles or think their growth is larger than it really is.
* **Management Filters and Biases:** Managers’ personal biases can lead them to make decisions that they shouldn’t. Such biases may cause managers to select and pay attention to some information while ignoring anything that doesn’t match their ideas or expectations. Despite having excellent data such a biassed perspective keeps us from understanding what the systems are trying to share.
* **Organizational Inertia:** The organization’s stronger groups may work against change. Because of this discomfort, some managers may avoid using new data methods and instead depend on their own intuition or earlier strategies.
* **Systems Not Fulfilling Executive Requirements:** If decision support systems don’t supply relevant, important data on a detailed enough level, executives may not be able to analyse their strategies in depth which could result in mistakes. Because there’s a mismatch, the system is not as effective as it might be which could result in missed opportunities or poor business decisions.

**Scenario Analysis No 5:**

**5 (a)**

Managers in manufacturing can use ERP to deal with increased complexity. An ERP allows all departments of an organization to coordinate their actions more easily. They link and weave together main company operations by using a single information system. Data that was held separately by departments can now be used and accessed across the whole organisation. Thanks to this, there is only one flow of data that unites manufacturing, accounting, human resources and other company functions.

With ERP systems, a firm’s unique system and technology are brought together to smooth out its business procedures. They make ways of working more efficient. Operations value this integration since it merges manufacturing matters with work further upstream like procurement and downstream like finance and HR.

Various systems, typically modules within a comprehensive ERP suite, support key workflows:

* **Procurement:** This is an important approach for both manufacturing and the supply chain. With ERP, ordering and interactions with suppliers are both easier. Business intelligence strengthens procurement by improving how companies’ source, work with suppliers and ship their goods.
* **Finance & Accounting:** Foremost duties of ERP financial modules are the general ledger, dealing with accounts receivable/payable, budget planning and cost accounting. All sales earnings, production charges and supply payments are gathered in one easy-to-see financial report.
* **Human Resources (HR):** In ERP, payroll, employee data, benefits and training are all connected. By tracking labour costs in this way, managers can relate the number of people being hired to training activities.
* **Production (Manufacturing):** That is the focus of manufacturing ERP, helping with planning, ordering, deliveries, receiving goods, design and running the business. This means including MRP and production planning which connect procurement, HR and sales/CRM so production is in line with the supply, workforce and demands from customers.

**5 (b)**

ERP tools might not work smoothly in combination across departments because several issues can lead to financial losses and in effectivity for managers. The nature of massive, integrated systems typically causes several challenges:

* **Requires Fundamental Changes in Business Operations:** Implementing an ERP system changes the whole business which means each department must examine and standardize their processes. Even so, when organizations resist change, this can decrease both teamwork and how well things are done.
* **Organizational Resistance:** Changes to organizational structure and process brought by ERP can be easily disrupted by those in political positions. It all depends on employees from different departments joining together, getting support from leaders and managers changing their ways of thinking.
* **Information Quality Issues:** Reports are disrupted due to redundant and inconsistent data or errors from the older systems used in ERPs. If departments have poor data, it hinders teamwork, effective decision-making and efficiency within the team.
* **Complexity and Investment:** Setting up a complex, costly ERP system takes both time and skill. When internal and external systems do not work well together, projects may take longer, require more budget and teamwork can suffer.
* **Management Filters:** ERP data might be correct, but the way managers understand it can compromise the truth the data provides. Because of this approach, different departments struggle to work together.