

Topic 4: Introduction to Enterprise Business Systems

- Introduction and Definition
- Enterprise Resource Planning (Goals, components, benefits and failures of ERP)
- Customer Relationship Management (Trends, benefits and challenges)
- Supply Chain Management (Goals, trends, benefits and challenges of SCM)

1) Introduction and Definition

Enterprise Business Systems (EBS) refer to a set of integrated software applications that support an entire organization's operations, including financials, human resources, supply chain management, and customer relationship management. EBS are integrated software solutions that enable organizations to manage and automate their business processes, improving efficiency, productivity, and decision-making.

Types of Enterprise Business Systems

There are several types of EBS, each catering to specific business needs and functions.

- a) Enterprise Resource Planning (ERP) Systems. ERP systems integrate various business functions, such as finance, human resources, supply chain management, and customer relationship management, into a single platform. Examples of ERP systems include: SAP ERP, Oracle ERP and Microsoft Dynamics etc.
- b) Customer Relationship Management (CRM) Systems. CRM systems focus on managing customer interactions, sales, and marketing activities. Examples of CRM systems include: Salesforce, HubSpot, and Zoho CRM etc.
- c) Supply Chain Management (SCM) Systems. SCM systems enable organizations to manage their supply chain operations, including procurement, inventory management, and logistics. Examples of SCM systems include: SAP SCM, Oracle SCM, and Manhattan Associates.
- d) Human Capital Management (HCM) Systems. HCM systems help organizations manage their workforce, including recruitment, payroll, benefits, and performance management. Examples of HCM systems include: Workday, Oracle HCM, and SAP SuccessFactors.
- e) Enterprise Asset Management (EAM) Systems. EAM systems enable organizations to manage their physical assets, including maintenance, repair, and replacement. Examples of EAM systems include: SAP EAM, Oracle EAM, and IBM Maximo etc

- f) Business Intelligence (BI) Systems. BI systems provide organizations with data analysis and reporting capabilities, enabling informed decision-making. Examples of BI systems include: Tableau, Power BI, and QlikView.
- g) Enterprise Content Management (ECM) Systems. ECM systems help organizations manage their content, including documents, images, and videos. Examples of ECM systems include: SharePoint, Documentum, and Alfresco etc
- h) Enterprise Mobility Management (EMM) Systems. EMM systems enable organizations to manage their mobile devices, applications, and content. Examples of EMM systems include: MobileIron, AirWatch, and Microsoft Intune etc
- i) Identity and Access Management (IAM) Systems. IAM systems help organizations manage user identities, authentication, and access to resources. Examples of IAM systems include: Okta, Ping Identity, and Microsoft Azure Active Directory etc
- j) Business Process Management (BPM) Systems. BPM systems enable organizations to automate and optimize their business processes. Examples of BPM systems include: Pega, Appia, and IBM BPM etc

Explanations of International of some Examples of EBS

- a) SAP: SAP is a leading provider of EBS solutions, used by organizations such as Coca-Cola, IBM, and Microsoft.
- b) Oracle: Oracle is another leading provider of EBS solutions, used by organizations such as General Electric, Intel, and Cisco Systems.
- c) Microsoft Dynamics: Microsoft Dynamics is a popular EBS solution, used by organizations such as The Coca-Cola Company, Dell, and HP.

2) Enterprise Resource Planning (Goals, components, benefits and failures of ERP)

Enterprise Resource Planning (ERP)

Enterprise Resource Planning (ERP) is a type of software that helps organizations manage their business operations more efficiently. It integrates various functions, such as financials, human resources, supply chain management, and customer relationship management, into a single system.

Major Components of Enterprise Resource Planning

The major components of ERP include:

- i) Financial Management: This module manages financial operations, such as accounting, budgeting, and forecasting.

- ii) Human Capital Management: This module manages human resources operations, such as recruitment, payroll, and benefits administration.
- iii) Supply Chain Management: This module manages supply chain operations, such as procurement, inventory management, and logistics.
- iv) Customer Relationship Management: This module manages customer relationships, including sales, marketing, and customer service.

Benefits of Enterprise Resource Planning (ERP)

- i) Improved Efficiency: ERP streamlines operations, reducing manual labor and improving productivity.
- ii) Enhanced Decision-Making: ERP provides real-time data and analytics, enabling informed decision-making.
- iii) Better Customer Service: ERP helps organizations respond quickly to customer inquiries and resolve issues efficiently.
- iv) Increased Transparency: ERP provides a single, unified view of the organization, improving transparency and accountability.
- v) Improved Supply Chain Management: ERP helps organizations manage their supply chains more effectively, improving inventory management and reducing costs.
- vi) Enhanced Collaboration: ERP enables organizations to collaborate more effectively with partners, suppliers, and customers.
- vii) Improved Financial Management: ERP helps organizations manage their financial operations more effectively, improving accounting, budgeting, and forecasting.
- viii) Reduced Costs: ERP helps organizations reduce costs by streamlining operations, improving supply chain management, and enhancing financial management.
- ix) Improved Data Management: ERP helps organizations manage their data more effectively, improving data quality and reducing data errors.
- x) Enhanced Security: ERP provides robust security features, protecting sensitive data and preventing unauthorized access.
- xi) Improved Compliance: ERP helps organizations comply with regulatory requirements and industry standards.
- xii) Increased Agility: ERP enables organizations to respond quickly to changing market conditions and customer needs.

Failures of Enterprise Resource Planning (ERP)

- i) Poor Implementation: ERP implementation can be complex and time-consuming, and poor implementation can lead to failure.
- ii) Insufficient Training: ERP requires significant training, and insufficient training can lead to user resistance and failure.

- iii) Inadequate Customization: ERP requires customization to meet the specific needs of the organization, and inadequate customization can lead to failure.
- iv) High Costs: ERP can be expensive, and high costs can lead to failure.
- v) Complexity: ERP can be complex, and complexity can lead to user resistance and failure.
- vi) Lack of Executive Support: ERP requires executive support, and lack of executive support can lead to failure.
- vii) Poor Data Quality: ERP requires high-quality data, and poor data quality can lead to failure.
- viii) Inadequate Testing: ERP requires significant testing, and inadequate testing can lead to failure.
- ix) Lack of User Adoption: ERP requires user adoption, and lack of user adoption can lead to failure.
- x) Inadequate Maintenance: ERP requires ongoing maintenance, and inadequate maintenance can lead to failure.

Examples of ERP failures include:

- a) Nike: Nike's ERP implementation failed due to poor implementation and insufficient training.
- b) Hershey's: Hershey's ERP implementation failed due to inadequate customization and high costs.

3) Customer Relationship Management (Trends, benefits and challenges)

Customer Relationship Management (CRM) is a strategy and set of software applications that help organizations manage their interactions with customers, clients, and sales prospects. CRM systems collect and analyze customer data, enabling organizations to provide personalized and effective customer service.

Major Trends of Customer Relationship Management

- i) Cloud-Based CRM: Cloud-based CRM systems are becoming increasingly popular due to their scalability, flexibility, and cost-effectiveness.
- ii) Artificial Intelligence (AI) and Machine Learning (ML): AI and ML are being used in CRM systems to analyze customer data, predict customer behavior, and provide personalized recommendations.
- iii) Mobile CRM: Mobile CRM systems enable sales teams to access customer data and interact with customers on-the-go.
- iv) Social CRM: Social CRM systems enable organizations to interact with customers on social media platforms and provide personalized service.
- v) Omnichannel CRM: Omnichannel CRM systems enable organizations to provide seamless customer experiences across multiple channels, including social media, email, phone, and in-person.

Benefits of Customer Relationship Management

- i) Improved Customer Service: CRM systems enable organizations to provide personalized and effective customer service.
- ii) Increased Sales: CRM systems enable sales teams to access customer data and interact with customers more effectively, leading to increased sales.
- iii) Enhanced Customer Insights: CRM systems provide organizations with valuable insights into customer behavior and preferences.
- iv) Improved Marketing: CRM systems enable organizations to target marketing efforts more effectively, leading to improved marketing ROI.
- v) Increased Customer Loyalty: CRM systems enable organizations to build strong relationships with customers, leading to increased customer loyalty.
- vi) Improved Communication: CRM systems enable organizations to communicate more effectively with customers, leading to improved customer satisfaction.
- vii) Enhanced Collaboration: CRM systems enable sales, marketing, and customer service teams to collaborate more effectively, leading to improved customer experiences.
- viii) Improved Data Management: CRM systems enable organizations to manage customer data more effectively, leading to improved data quality and reduced data errors.
- ix) Increased Efficiency: CRM systems automate many routine tasks, leading to increased efficiency and reduced costs.
- x) Improved Forecasting: CRM systems provide organizations with valuable insights into customer behavior and preferences, enabling more accurate forecasting.
- xi) Improved Customer Retention: CRM systems enable organizations to identify and address customer concerns, leading to improved customer retention.
- xii) Increased Competitiveness: CRM systems enable organizations to differentiate themselves from competitors and provide unique customer experiences.

Customer Relationship Management Challenges

- i) Data Quality. Data quality is a significant challenge in CRM, as inaccurate or incomplete data can lead to ineffective customer interactions.
- ii) User Adoption. User adoption is a significant challenge in CRM, as users may resist using the system or may not have the necessary skills to use it effectively.
- iii) Integration with Existing Systems. Integration with existing systems is a significant challenge in CRM, as it can be difficult to integrate the CRM system with other systems such as ERP and marketing automation systems.

- iv) Customization and Configuration. Customization and configuration are significant challenges in CRM, as the system may require significant customization and configuration to meet the specific needs of the organization.
- v) Cost and Return on Investment (ROI). Cost and ROI are significant challenges in CRM, as the system can be expensive to implement and maintain, and the ROI may not be immediately apparent.
- vi) Security and Data Privacy. Security and data privacy are significant challenges in CRM, as the system requires the collection and storage of sensitive customer data.
- vii) Scalability and Flexibility. Scalability and flexibility are significant challenges in CRM, as the system must be able to scale to meet the growing needs of the organization and adapt to changing business requirements.
- viii) Training and Support. Training and support are significant challenges in CRM, as users require training and support to use the system effectively.
- ix) Change Management. Change management is a significant challenge in CRM, as the system requires significant changes to business processes and user behavior.

4) Supply Chain Management (Goals, trends, benefits and challenges of SCM)

Supply Chain Management

Supply Chain Management (SCM) is the coordination and management of activities involved in sourcing, production, and delivery of products or services to customers. SCM involves the integration of activities across the supply chain, including procurement, inventory management, transportation, and logistics.

Major Trends of Supply Chain Management

- i) Digitalization: Digitalization is transforming the supply chain, with the use of technologies such as artificial intelligence, blockchain, and the Internet of Things (IoT).
- ii) Sustainability: Sustainability is becoming increasingly important in supply chain management, with companies focusing on reducing their environmental impact and improving social responsibility.
- iii) Omnichannel Logistics: Omnichannel logistics involves the integration of logistics and transportation systems to provide seamless customer experiences across multiple channels.
- iv) Supply Chain Visibility: Supply chain visibility involves the use of technologies such as blockchain and IoT to provide real-time visibility into the supply chain.

- v) Artificial Intelligence (AI) and Machine Learning (ML): AI and ML are being used in supply chain management to optimize logistics, predict demand, and improve supply chain resilience.

Benefits of Supply Chain Management

- i) Improved Efficiency: SCM helps organizations streamline their operations, reducing costs and improving productivity.
- ii) Increased Customer Satisfaction: SCM helps organizations provide better customer service, improving customer satisfaction and loyalty.
- iii) Reduced Costs: SCM helps organizations reduce costs, improving profitability and competitiveness.
- iv) Improved Quality: SCM helps organizations improve the quality of their products and services, reducing defects and improving customer satisfaction.
- v) Increased Agility: SCM helps organizations respond quickly to changing market conditions, improving agility and competitiveness.
- vi) Improved Supply Chain Resilience: SCM helps organizations improve their supply chain resilience, reducing the risk of disruptions and improving business continuity.
- vii) Increased Transparency: SCM helps organizations improve transparency, providing real-time visibility into the supply chain.
- viii) Improved Collaboration: SCM helps organizations improve collaboration, enabling better communication and coordination with suppliers and partners.
- ix) Increased Innovation: SCM helps organizations increase innovation, enabling the development of new products and services.
- x) Improved Risk Management: SCM helps organizations improve risk management, reducing the risk of supply chain disruptions and improving business continuity.
- xi) Increased Sustainability: SCM helps organizations increase sustainability, reducing environmental impact and improving social responsibility.
- xii) Improved Compliance: SCM helps organizations improve compliance, ensuring adherence to regulatory requirements and industry standards.

Challenges of Supply Chain Management

- i) Complexity. Supply chain complexity can lead to inefficiencies, increased costs, and reduced agility.
- ii) Visibility and Transparency. Lack of visibility and transparency in the supply chain can lead to delays, inventory imbalances, and reduced customer satisfaction.
- iii) Risk Management. Supply chain risk management is critical to mitigate risks such as natural disasters, supplier insolvency, and cyber attacks.

- iv) Talent and Skills. Supply chain talent and skills are critical to manage complex supply chains, but there is a shortage of skilled professionals.
- v) Sustainability. Supply chain sustainability is critical to reduce environmental impact, improve social responsibility, and ensure long-term viability.
- vi) Technology Integration. Supply chain technology integration is critical to improve efficiency, reduce costs, and enhance customer experience.
- vii) Globalization. Supply chain globalization is critical to manage complex global supply chains, but it also presents challenges such as language barriers, cultural differences, and regulatory compliance.
- viii) Inventory Management. Supply chain inventory management is critical to ensure that the right products are available at the right time, but it also presents challenges such as inventory imbalances, stockouts, and overstocking.
- ix) Logistics and Transportation. Supply chain logistics and transportation are critical to ensure that products are delivered to customers on time, but it also presents challenges such as transportation disruptions, logistics costs, and delivery delays.
- x) Cybersecurity. Supply chain cybersecurity is critical to protect against cyber threats and ensure the integrity of supply chain data, but it also presents challenges such as data breaches, cyber attacks, and supply chain disruptions.

In conclusion, EBS are essential for organizations to manage and automate their business processes, improving efficiency, productivity, and decision-making. The various types of EBS cater to specific business needs and functions, and organizations can choose the systems that best suit their requirements.

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