

MIS: Enterprise Information Systems

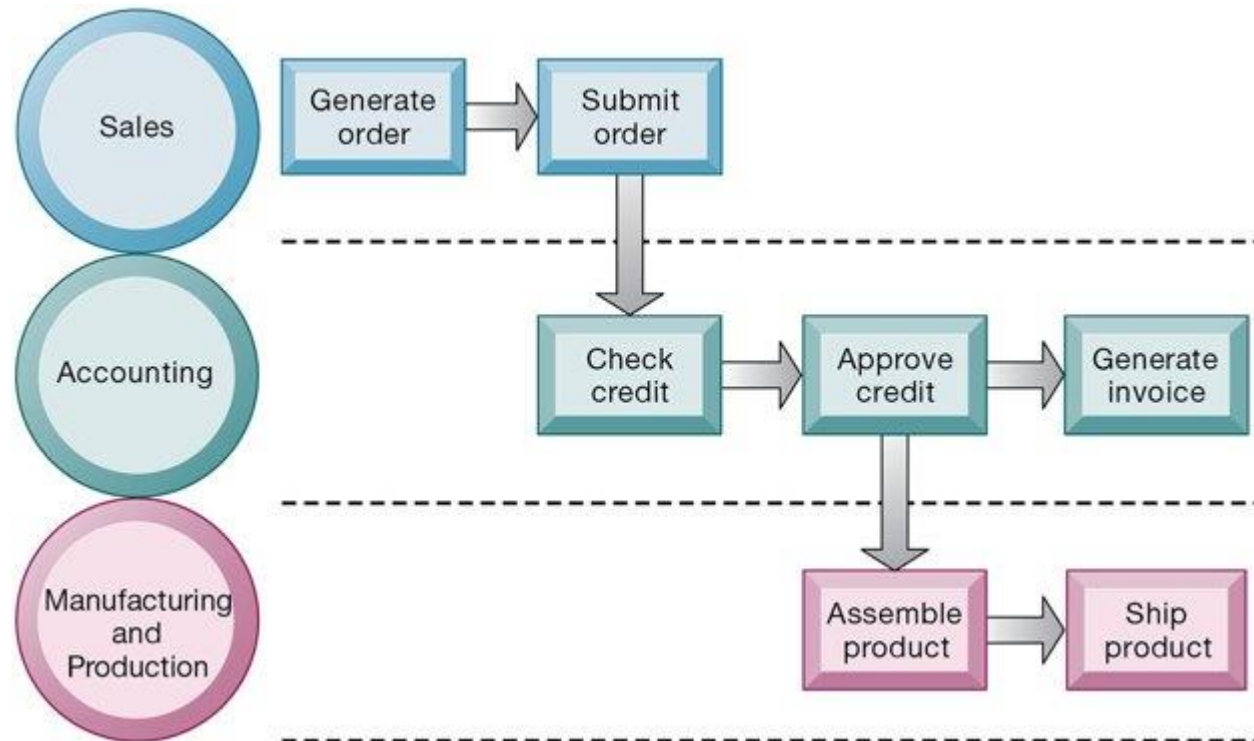
IS STRATEGY, DTSL, S-4

NEENA PANDEY, IIMV

Business Processes

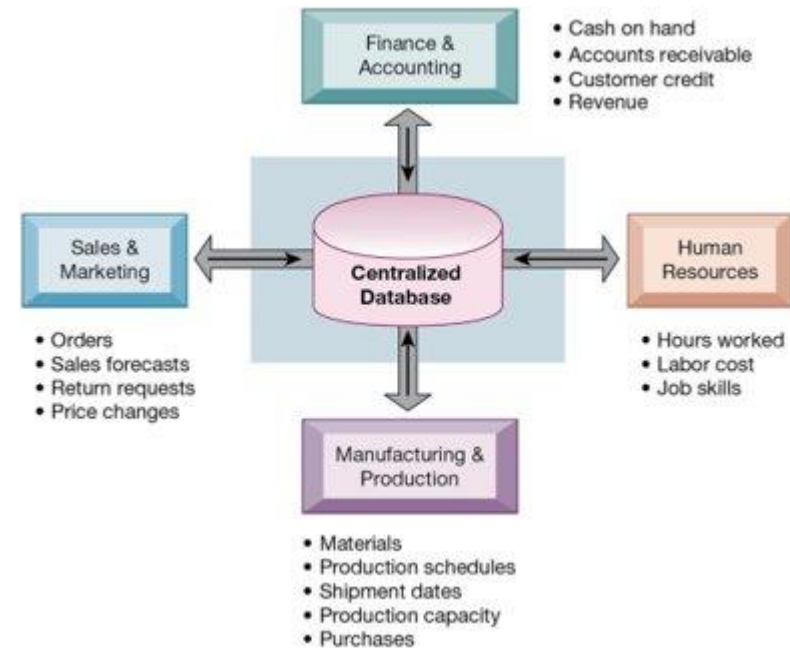
- Business processes
 - Flow of material, information and knowledge
 - Logically related set of tasks that define how specific business tasks are performed
 - May be tied to functional area or be cross-functional
- Business
 - Collection of business processes
- Business processes may be assets or liabilities
- Examples (within a functional department)
 - Manufacturing and production - ?
 - Sales and marketing - ?
 - Human Resources - ?

A Business Process: Order Fulfillment (Across Functional Departments)



What are Enterprise Systems?

- Also known as enterprise resource planning (ERP) systems
- Based on a suite of integrated s/w modules and a common central database
- Collects data from many divisions of firm for use in nearly all of firm's internal business activities
- Information entered in one process is immediately available for other processes



Enterprise Software

- Built around thousands of predefined business processes that reflect best practices
 - Finance and accounting
 - Human resources
 - Manufacturing and production
 - Sales and marketing
- To implement, firms:
 - Select functions of system they wish to use
 - Map business processes to software processes
 - Use software's configuration tables to tailor a particular aspect
 - Too much customization may degrade the performance

Business Value of Enterprise Systems

- Increase operational efficiency
- Better decision making
 - By providing firm-wide information
 - By including analytical tools to evaluate overall organizational performance
- To enforce standardization across business units
- Enable rapid responses to customer requests

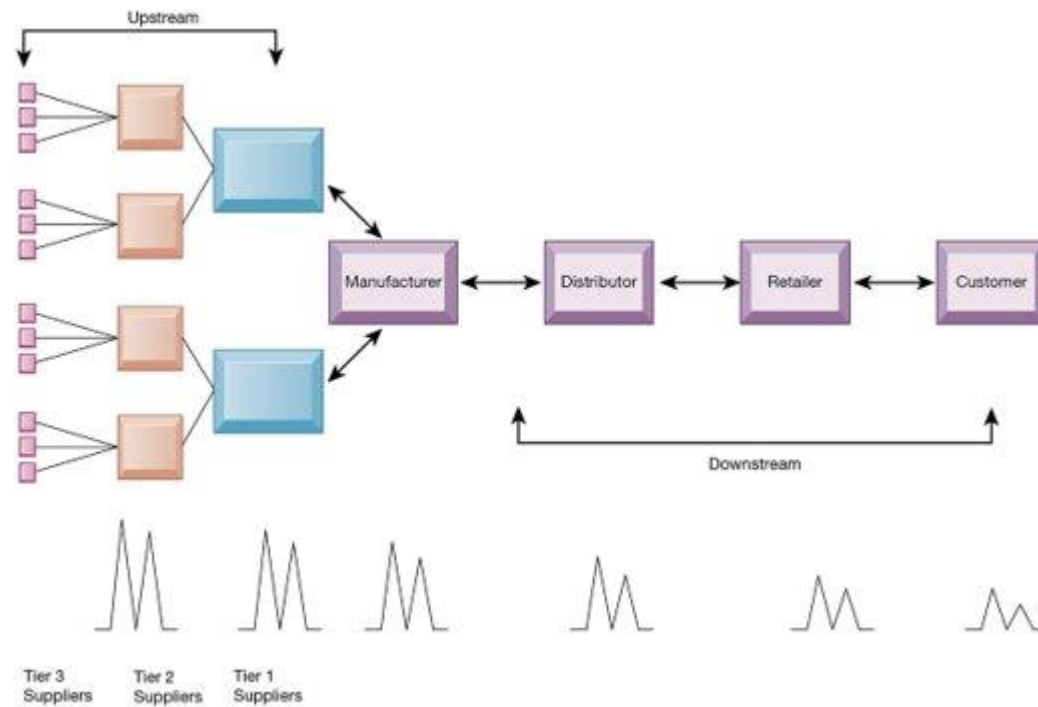
Supply Chain

- Network of organizations and processes for:
 - Procuring materials
 - Transforming materials into products
 - Distributing the products
- Upstream supply chain
 - Sourcing, acquiring, and transporting of raw materials
 - Supplier selection, procurement, and inventory management
- Downstream supply chain
 - Finished products distribution – warehousing, transportation, and order fulfillment
- Internal supply chain

Supply Chain Management

- Sources of inefficiencies
 - Part shortages, underused plant capacity, excessive finished goods inventory, high transportation costs owing to incorrect or late information
- Inefficiencies cut into a company's operating costs
 - Can waste up to 25 percent of operating expenses
- Safety stock: buffer for lack of flexibility in supply chain
- Bullwhip effect
 - Information about product demand gets distorted as it passes from one entity to next across supply chain
- Just-in-time strategy
 - Components arrive as they are needed
 - Finished goods shipped after leaving assembly line

The Bullwhip Effect



Supply Chain Management Software

- Supply chain planning systems
 - Model existing supply chain
 - Enable demand planning
 - Optimize sourcing, manufacturing plans
 - Establish inventory levels
 - Identify transportation modes
- Supply chain execution systems
 - Manage flow of products through distribution centers and warehouses
 - E.g., WMS

SCM System: Business Value

- From push-based to pull-based (build-to-order) model
- Match supply to demand
- Reduce inventory levels
- Improve delivery service
- Speed-up product time-to-market
- Use assets more effectively
 - Total supply chain costs can be 75 percent of operating budget
- Increase sales

Customer Relationship Management

- Knowing the customer
- In large businesses, too many customers and too many ways customers interact with firm
- CRM Cycle
 - Marketing – Identify customers by running marketing campaigns
 - Sales – Generate and classify leads
 - Product – Delivery of products – product price, description etc.
 - Support – resolve customer issues and provide customer support

CRM Systems

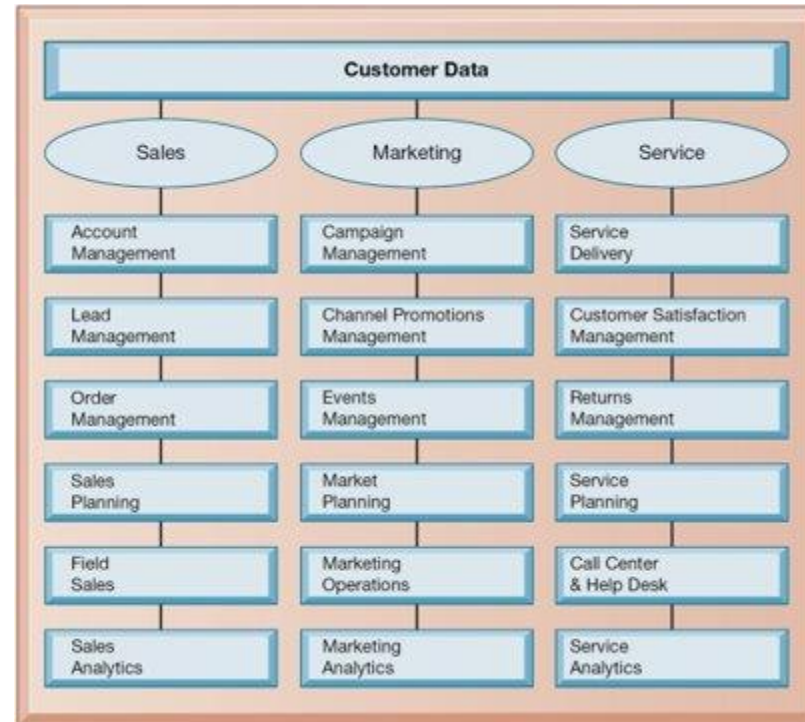
- Role of CRM systems
 - Capture and integrate customer data from all over the organization
 - Consolidate and analyze customer data
 - Distribute customer information to various systems and customer touch points across enterprise
 - Provide single enterprise view of customers

Customer Relationship Management



CRM Software

- Packages range from niche tools to large-scale enterprise applications
- More comprehensive packages have modules for:
 - Partner relationship management (PRM)
 - Integrating lead generation, pricing, promotions, order configurations, and availability
 - Tools to assess partners' performances
 - Employee relationship management (ERM)
 - Setting objectives, employee performance management, performance-based compensation, employee training



Operational & Analytical CRM

➤ Operational CRM

- Customer-facing applications
- Sales force automation – product information & configuration, sales quote generation
- Call center and customer service support
- Marketing automation

➤ Analytical CRM

- Based on data warehouses populated by operational CRM systems and customer touch points
- Analyzes customer data (e.g., data mining)
- Customer lifetime value (CLTV)