Chapter 9

Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

Video Cases
- Video Case 1a: What Is Workday: Enterprise Software as a Service (SaaS)
- Video Case 1b: Workday: Mobile Solutions for iPad
- Video Case 2: Evolution Homecare Manages Patients with Microsoft CRM (2011)
- Instructional Video 1: Zara’s: Wearing Today’s Fashions with Supply Chain Management

LEARNING OBJECTIVES
- How do enterprise systems help businesses achieve operational excellence?
- How do supply chain management systems coordinate planning, production, and logistics with suppliers?
- How do customer relationship management systems help firms achieve customer intimacy?
- What are the challenges posed by enterprise applications and how are enterprise applications taking advantage of new technologies?

ACH Food Companies Transforms Its Business with Enterprise Systems

- Problem: Legacy systems cobbled together and designed for old business model; system needed to support new consumer products business
- Solution: SAP enterprise resource planning system
- Demonstrates use of technology to support new business models and efficiency, integrate cross-enterprise data for single, consistent view

Enterprise systems
- Enterprise resource planning (ERP) systems
- Suite of integrated software 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 systems feature a set of integrated software modules and a central database that enables data to be shared by many different business processes and functional areas throughout the enterprise.

**Figure 9-1**

*How Enterprise Systems Work*

- 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 for customizing.

- Business value of enterprise systems
  - Increase operational efficiency
  - Provide firm-wide information to support decision making
  - Enable rapid responses to customer requests for information or products
  - Include analytical tools to evaluate overall organizational performance

- Supply chain
  - Network of organizations and processes for:
    - Upstream supply chain: Firm’s suppliers, suppliers’ suppliers, processes for managing relationships with them
    - Downstream supply chain: Organizations and processes responsible for delivering products to customers
    - Internal supply chain
• Supply chain management
  – Inefficiencies cut into a company’s operating costs
    • Can waste up to 25 percent of operating expenses
  – Just-in-time strategy:
    • Components arrive as they are needed
    • Finished goods shipped after leaving assembly line
  – 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

• 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
Interactive Session: Management

Scott’s Miracle-Gro Cultivates Supply Chain Proficiency

Read the Interactive Session and discuss the following questions:

- Identify the supply chain management problems faced by Scotts Miracle-Gro. What was the business impact of not being able to manage the company’s supply chain well?
- What management, organization, and technology factors contributed to Scotts Miracle-Gro’s supply chain problems?
- How did implementing JDA Software solutions change the way Scotts Miracle-Gro ran its business?
- How did the new supply chain systems improve management decision making? Describe two decisions that were improved by the new system solution.

Global supply chain issues
- Greater geographical distances
- Greater time differences
- Participants from different countries
  - Different performance standards
  - Different legal requirements

Internet helps manage global complexities
- Warehouse management
- Transportation management
- Logistics
- Outsourcing

Supply chain management
- Push-based model (build-to-stock)
  - Earlier SCM systems
  - Schedules based on best guesses of demand
- Pull-based model (demand-driven)
  - Web-based
  - Customer orders trigger events in supply chain
- Internet enables move from sequential supply chains to concurrent supply chains
  - Complex networks of suppliers can adjust immediately

The difference between push and pull-based models is summarized by the slogan “Make what we sell, not sell what we make.”
The emerging Internet-driven supply chain operates like a digital logistics nervous system. It provides multidirectional communication among firms, networks of firms, and e-marketplaces so that entire networks of supply chain partners can immediately adjust inventories, orders, and capacities.

Business value of SCM systems
- Match supply to demand; reduce inventory levels
- Improve delivery service
- Speed product time to market
- Use assets more effectively
- Reduced supply chain costs lead to increased profitability
  - Total supply chain costs can be 75 percent of operating budget
  - Increase sales

Customer relationship management (CRM)
- Knowing the customer
- In large businesses, too many customers and too many ways customers interact with firm

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 Systems
CRM systems examine customers from a multifaceted perspective. These systems use a set of integrated applications to address all aspects of the customer relationship, including sales, marketing, service, and support.

Figure 9-6

Supply Chain Management Systems
- Business value of SCM systems
- Total supply chain costs can be 75 percent of operating budget
- Increase sales
• CRM software
  – Packages range from niche tools to large-scale enterprise applications.
  – More comprehensive 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

Customer relationship management software provides a single point for users to manage and evaluate marketing campaigns across multiple channels, including e-mail, direct mail, telephone, the Web, and text messages.

Responses by Channel for January 2015 Promotional Campaign

Direct Mail 29.2%
Telephone 10.0%
Web 30.8%
E-mail 17.3%
Social Media 6.7%

The major CRM software products support business functions in sales, service, and marketing, integrating customer information from many different sources. It includes both the operational and analytical aspects of CRM.
This process map shows how a best practice for promoting customer loyalty through customer service would be modeled by customer relationship management software. The CRM software helps firms identify high-value customers for preferential treatment.

- **Operational CRM:**
  - Customer-facing applications such as sales force automation, call center and customer service support, and marketing automation

- **Analytical CRM:**
  - Based on data warehouses populated by operational CRM systems and customer touch points
  - Analyzes customer data (OLAP, data mining, etc.)
    - Customer lifetime value (CLTV)

**Interactive Session:** Organizations

- What was the problem at Graybar described in this case? How did this problem affect Graybar’s business performance?
- What management, organization, and technology issues had to be addressed by Graybar to develop a customer analytics solution?
- How did analytical CRM change the way Graybar ran its business? Compare the way Graybar handled its customer relationships before and after it implemented analytical CRM.
- Give examples of three decisions that were improved by Graybar’s new customer analytics system.
• Business value of CRM systems
  – Increased customer satisfaction
  – Reduced direct-marketing costs
  – More effective marketing
  – Lower costs for customer acquisition/retention
  – Increased sales revenue
• Churn rate:
  – Number of customers who stop using or purchasing products or services from a company
  – Indicator of growth or decline of firm’s customer base

• Enterprise application challenges
  – Highly expensive to purchase and implement enterprise applications
    • Average cost of ERP project in 2014—$2.8 million
  – Technology changes
  – Business process changes
  – Organizational learning, changes
  – Switching costs, dependence on software vendors
    • Integrating cloud applications
  – Data standardization, management, cleansing

• Next-generation enterprise applications
  – Enterprise solutions/suites:
    • Make applications more flexible, Web-enabled, integrated with other systems
  – SOA standards
  – Open-source applications
  – On-demand solutions
  – Cloud-based versions
  – Functionality for mobile platform

• Next-generation enterprise applications (cont.)
  – Social CRM
    • Incorporating social networking technologies
    • Company social networks
    • Monitor social media activity, social media analytics
    • Manage social and Web-based campaigns
  – Business intelligence
    • Inclusion of BI with enterprise applications
    • Flexible reporting, ad hoc analysis, “what-if” scenarios, digital dashboards, data visualization
Management Information Systems
Chapter 9: Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

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