

SCM, CRM, BI, and ICE

I. SUPPLY CHAIN MANAGEMENT (SCM)

For example, a company the size of Wal-Mart, with operations all over the world and tens of thousands of suppliers, supply chain management and IT-based supply chain management systems are critical necessities to ensure the smooth flow of parts to GM factories.

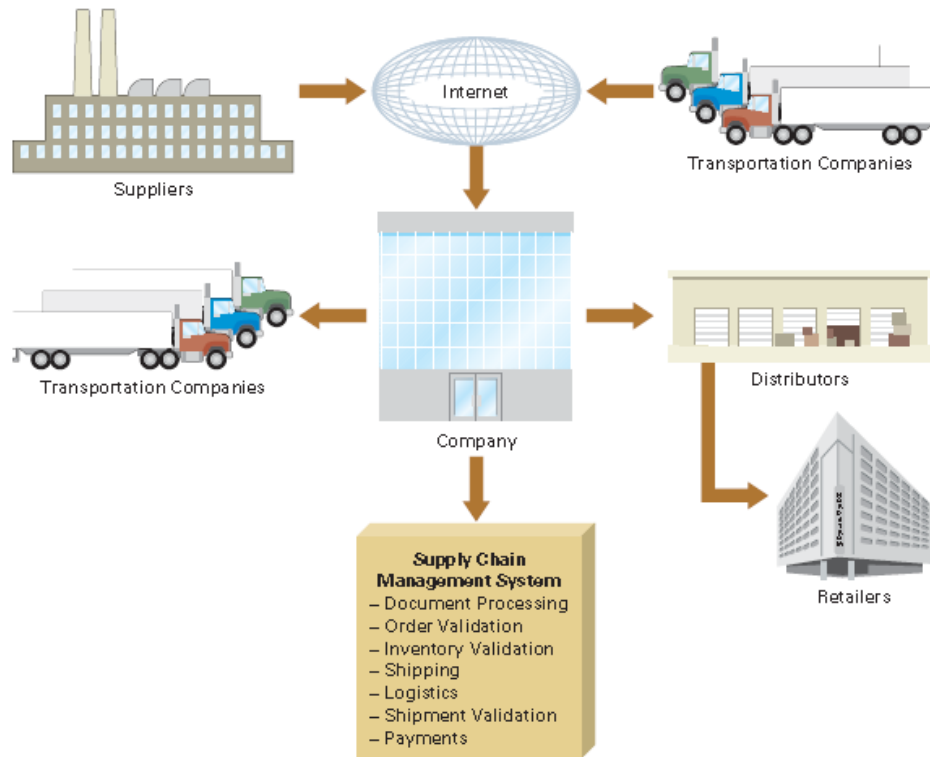
Supply chain management (SCM) tracks inventory and information among business processes and across companies. A **supply chain management (SCM) system** is an IT system that supports supply chain management activities by automating the tracking of inventory and information among business processes and across companies.

Most large manufacturing companies use just-in-time manufacturing processes, which ensure that the right parts are available as products in process move down the assembly line. **Just-in-time (JIT)** is an approach that produces or delivers a product or service just at the time the customer wants it. For retailers, like Target, this means that products customers want to buy are on the shelves when customers walk by. Supply chain management systems also focus on making sure that the *right number* of parts or products are available, not too many and not too few. Too many products on hand means that too much money is tied up in inventory and also increases the risk of obsolescence. Too few products on hand is not a good thing either, because it could force an assembly line to shut down or, in the case of retailers, lose sales because an item is not in stock when a customer is ready to buy.

A sample supply chain management system is illustrated in Figure 1

Figure 1 - A Sample Supply Chain Management (SCM) System Infrastructure

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STRATEGIC AND COMPETITIVE OPPORTUNITIES WITH SUPPLY CHAIN MANAGEMENT

A well-designed supply chain management system chain helps a business by optimizing the following processes:

1. **Fulfillment**—Ensuring the right quantity of parts for production or products for sale arrive at the right time.
2. **Logistics**—Keeping the cost of transporting materials as low as possible consistent with safe and reliable delivery.
3. **Production**—Ensuring production lines function smoothly because high quality parts are available when needed.
4. **Revenue and profit**—Ensuring no sales are lost because shelves are empty.
5. **Spend**—Keeping the cost of purchased parts and products at acceptable levels.

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CHALLENGES TO SUCCESS WITH SUPPLY CHAIN MANAGEMENT

To be successful with supply chain management, you can learn from the experiences of companies who have achieved business benefits with SCM. A survey noted the following four key issues:

1. High level executives must recognize the importance of supply chain management to the company's success.
2. You must work closely with your company's customers and suppliers to build world-class business processes.
3. Your supply chain management should be innovative in the way it integrates with internal IT systems as well as with the IT systems of key customers and suppliers.
4. You must continuously adapt your supply chain management strategies and systems as market needs change.

II. CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

What do you think is the primary driver for your organization? If you said the *customers*—congratulations, you are correct. Without customers, a business couldn't exist; and so, many businesses' primary goal is to increase customer satisfaction. Acquiring and retaining customers are the basic objectives of any organization and, as a result, customer relationship management systems has become one of the hottest IT systems in business today.

For example, Wells Fargo Bank's customer relationship management system tracks and analyzes every transaction made by its 10 million retail customers at its branches, its ATMs, and through its Web-based online banking systems. It has become so good at predicting customer behavior that it knows what customers need before many of them even realize they need it. Wells Fargo's system collects every customer transaction and combines it with personal information provided by the customer. The system is able to predict tailored offerings that will appeal to individual customers (a money-saving second mortgage, for example), at just the right time. As a result, Wells Fargo sells four additional banking products or services to its customers compared with an industry average of 2.2.

A **customer relationship management (CRM) system** uses information about customers to gain insights into their needs, wants, and behaviors in order to serve them better. Customers interact with companies in many ways, and each interaction should be easy, enjoyable, and error free.

The goal of CRM is to limit negative interactions and provide customers with positive experiences.

CRM systems typically include such functions as:

1. **Sales force automation:** automatically track all the steps in the sales process. The sales process contains many steps including contact management, sales lead tracking, sales forecasting and order management, and product knowledge

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2. Customer service and support
3. Marketing campaign management and analysis

STRATEGIC AND COMPETITIVE OPPORTUNITIES WITH CUSTOMER RELATIONSHIP MANAGEMENT

One of the results of CRM is competitive advantage through achieving superior performance in CRM functions, in particular:

1. Devising more effective marketing campaigns based on more precise knowledge of customer needs and wants.
2. Assuring that the sales process is efficiently managed.
3. Providing superior after-sale service and support through, for example, well-run call centers.

One way to measure the benefits of CRM systems, according to one expert, is to place the benefits into two principal categories, revenue enhancers and cost cutters. Examples of revenue enhancers and cost cutters are shown in Table 1.

Table 1 - Example Revenue Enhancers and Cost Cutters

Revenue Enhancers	Cost Cutters
Increase sales effectiveness	Decrease cost of sales
Add new customers at a higher rate	More time to sell, less time on administration
Offer new products/services	Decrease cost of service
Provide a better customer Experience	Cost per service interaction
Increase revenue per customer	Transition to more self-service

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Sell more of current products/ Services	
Improve customer retention	

CHALLENGES TO SUCCESS WITH CUSTOMER RELATIONSHIP MANAGEMENT

While many CRM systems provide substantial business benefits, other CRM projects are considered less than successful. As a matter of fact, a Gartner Group study found that 40 percent of companies surveyed hadn't made an investment in CRM—and that more than 50 percent of those that had saw the installations as failures.

One analyst listed some of the most common reasons why CRM installations are less than successful:

1. **The company's goals are too broad.** Too often a CRM initiative tries to encompass everything that should be done to attain the vision of a customer-centric company. While there is nothing wrong with having this vision, companies need to realize that the vision is more easily achieved with a series of small, tactical steps rather than with one giant leap forward.
2. **Strategies are too generic.** CRM strategies must be business-specific. The CRM industry—analysts and consultants as well as vendors—have been saying that every company can use technology the same way to gain the same results. The truth is that each company needs a solution tailored to its unique requirements.
3. **Implementations are often too software-centric.** Technology can and should play a role in enhancing customer relationships—but a supporting role, not a leading one. Software should support the specific CRM processes each company needs to get real business benefits.

III. BUSINESS INTELLIGENCE (BI)

For example, Dr Pepper/7 Up is a subsidiary of Cadbury Schweppes, the global beverage giant and owner of highly visible beverage brands such as Dr Pepper, 7 Up, Canada Dry, Schweppes, Sunkist, A&W Root Beer, and many others.

The challenges associated with owning and distributing so many different brands are numerous, including:

- Needing to consolidate information on all product brands.
- Providing business intelligence so managers can make strategic decisions.

To support its varied information-processing needs, Cadbury Schweppes turned to technology.

Specifically, Cadbury implemented Cognos Business Intelligence (BI) software. Cognos is the world's leading provider of business intelligence software. Cognos BI is software that, among other things, provides the ability to aggregate information from many different sources. In this case, Cadbury uses Cognos BI to aggregate information from all its beverage lines.

Using the software, Cadbury is able to provide a single user interface to all its field people and management personnel. No matter how many different product lines a person may be looking at, the interface is the same as if that person were viewing only one product line.

Business intelligence (BI) is knowledge—knowledge about your customers, your competitors, your business partners, your competitive environment, and your own internal operations— that gives you the ability to make effective, important, and often strategic business decisions.

Business intelligence (BI) systems are the IT applications and tools that support the business intelligence function within an organization.

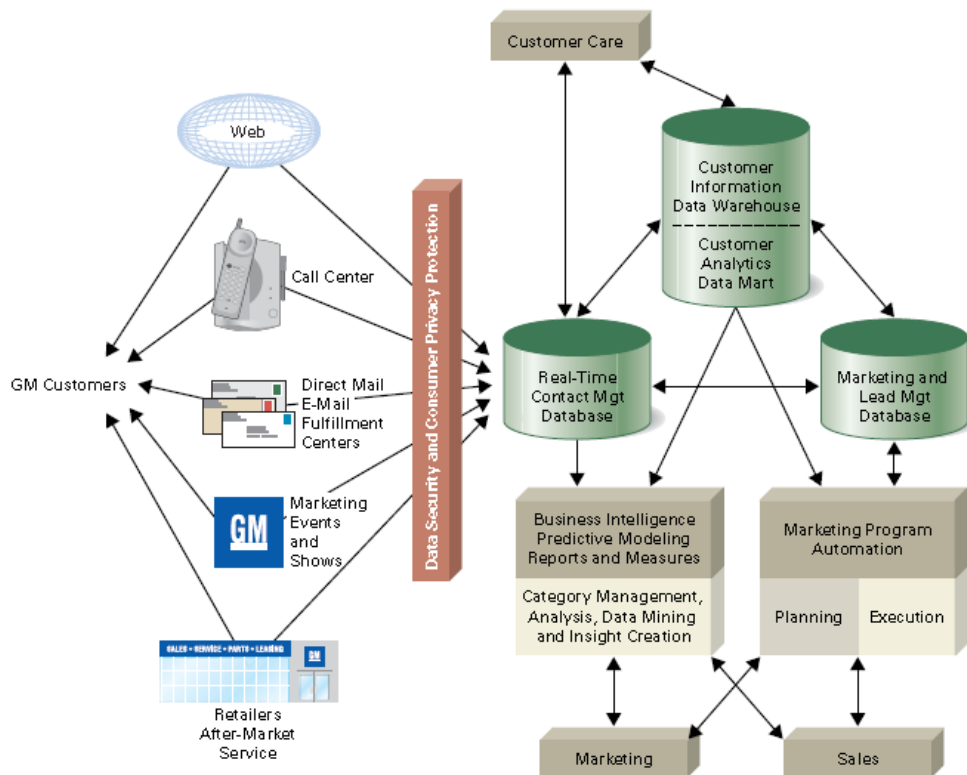
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Business managers face many kinds of decisions ranging from routine decisions (such as whether to order additional stock) to decisions with long-range strategic implications (such as whether to expand into international markets). A survey by the Gartner Group of the strategic uses of business intelligence found that such uses were ranked by firms in the following order of importance:

1. Corporate performance management.
2. Optimizing customer relations, monitoring business activity, and traditional decision support.
3. Packaged stand-alone BI applications for specific operations or strategies.
4. Management reporting of business intelligence.

For Example, Figure 1 illustrates how GM has integrated its various customer-facing systems with BI applications.

Figure 1 - Aggregating Customer Touch Points at General Motors.



CHALLENGES TO SUCCESS WITH BUSINESS INTELLIGENCE

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IT systems are of no value unless knowledge workers know how to use them effectively. BI systems are a great example of this. To ensure that BI systems have a high impact on business decisions, you must

1. Focus on using information provided by the BI systems to deal with an important business issue.
2. Provide the ability to customize BI information to each knowledge worker involved in the decision-making process.
3. Build discipline and precision into decision-making processes.
4. Recognize that knowledge workers must understand BI tools and know how to use them effectively.
5. Understand that many BI systems are complex systems and continually change as information provided them changes.

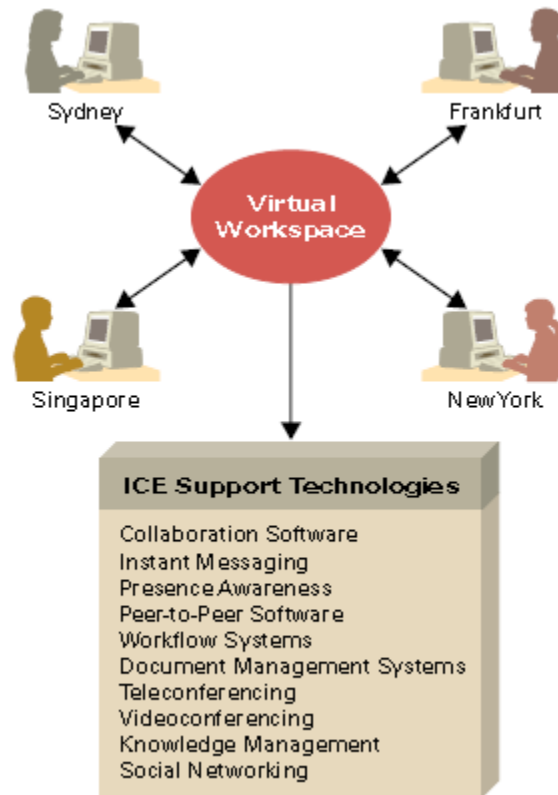
IV. INTEGRATED COLLABORATION ENVIRONMENT (ICE)

For example, Siemens AG, based in Munich, Germany, is a 150-year-old electrical engineering and electronics company with 440,000 employees in 190 countries. Much of its work is done in teams, whose members work in integrated collaborative environments supported by a state-of-the-art collaborative software suite, SiteScape's Forum (www.sitescape.com). A top Siemens executive describes his experience with the software this way: "A perfect example of the value Forum brings to Siemens is when I had to institute a cross-functional team of 18–20 people spread across the United States and Germany. We needed a communication channel that would be up 24 X 7. Because of the six-hour time difference, we set 9 A.M. and 3 P.M. as the push time. People were able to discuss ideas and share web-enabled documents."

Almost everything you do in your organization will be performed in a team environment. So, improving team collaboration greatly increases your organization's productivity and competitive advantage. An **integrated collaboration environment (ICE)** is the environment in which virtual teams do their work. **Virtual teams** are teams whose members are located in varied geographic locations and whose work is supported by specialized ICE software or by more basic collaboration systems. Integrated collaboration environments are supported by combinations of collaboration systems and other technologies as illustrated in Figure 1.

Figure 1 - An Integrated Collaboration Environment

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STRATEGIC AND COMPETITIVE OPPORTUNITIES WITH INTEGRATED COLLABORATION ENVIRONMENTS

The payoffs from collaboration can be huge. For example, while oil and gas exploration companies usually form joint ventures on large projects, they often do not collaborate on purchases of high-dollar value commodities for the project. A recent survey estimated that the industry could realize up to \$7 billion in annual savings by using collaborative technologies and seeking more collaborative preferred provider relationships.

There are many successful examples of knowledge management systems adding value. For example, in making the case for a knowledge system at Hewlett-Packard (HP), John Doyle, the former head of HP Labs is credited with saying, "If only HP knew what HP knows." What he meant by this was that there was a huge amount of valuable knowledge in the brains and files (both paper and computer) of HP employees. If HP knew what knowledge was there, and it was shared and accessible to others, it could be useful in solving critical problems, or could lead to ideas for new products and services.

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Figure 1 identifies some of the basic Integrated Collaboration Functions

Figure 1 - A Comparison of Integrated Collaboration Environment (ICE)

Type	Basic Functions	Example	Web site
Collaboration	Real time collaboration and conferencing	LiveMeeting	www.microsoft.com
Workflow	Business process management	Metastorm	www.metastorm.com
Document Management	Enterprise content management	FileNet	www.filenet.com
Peer to Peer	Desktop and mobile collaboration	Groove	www.groove.net
Knowledge Management	Knowledge capture, organization, location, and reuse	IBM Knowledge Discovery	www-306.ibm.com/software/lotus/knowledge/
Social Network	Leveraging your personal and professional network	Linkedin	www.linkedin.com

www.YouSign

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IV. INTEGRATION OF SCM, CRM, BI, AND ICE

The large airline companies, in particular, have given ample evidence over a number of years that they know how to integrate supply chain management systems, customer relationship management systems, business intelligence systems, and integrated collaboration environments for competitive advantage, as illustrated in Figure 1.

Figure 1 - Integration of SCM, CRM, BI, and ICE in the Airline Industry

SCM	CRM	BI	ICE
• Spare parts	• Reservation systems	• Yield management	• Virtual team projects
• Fuel	• Frequent flyer programs	• Profitability analysis	• Knowledge management
• Food/beverages	• Consumer Web sites	• Competitive analysis	• Social networking
• Other supplies	• Check-in kiosks	• Cost management	• Competitive threat