In only the two plus years immediately following 9/11 in the United States, there were 10 new major laws or initiatives created to regulate and control international trade. Many, if not all, of these regulations were security based:

1. Focus Assessment – Replacing CAT
2. Container Security Initiative (CSI)
3. Automated Customs Environment (ACE) – Replacing ACS
4. 24-Hour Rule
5. Trade Act of 2002
6. C-TPAT (Customs–Trade Partnership Against Terrorism)
7. TCMP (Trade Compliance Measurement Program)
8. The Bio-Terrorism Act of 2002
9. U.S. Customs and Border Protection
10. Department of Homeland Security established

The major challenge remains, to facilitate the free flow of goods across borders while still being able to secure the borders and prevent terrorism from entering the country through international trade channels.

- Transportation across national boundaries introduces added complexity and challenges security.
- Since 9/11 there has been an increased level of conflict between the U.S. government and industry regarding the adoption of additional security measures and the restrictions on international shipments.

## U.S. CUSTOMS AND BORDER PROTECTION

Originally established in 1789 as the U.S. Customs Service, "U.S. Customs and Border Protection, CBP, is one of the world's largest law enforcement organizations and is charged with keeping terrorists and their weapons out of the U.S. while facilitating lawful international travel and trade. As the United States' first unified border entity, CBP takes a comprehensive approach to border management and control, combining customs, immigration, border security, and agricultural protection into one coordinated and supportive activity."[4]

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- CBP is the gateway agency for more than 20 other government agencies, each of which has some control over various aspects of international trade.

- CBP's mission is to safeguard America's borders thereby protecting the public from dangerous people and materials, while enhancing the nation's global economic competitiveness by enabling legitimate trade and travel.

- CBP works to secure and facilitate imports arriving in the United States, accommodating the increasing volume and complexities of international trade.

- CBP protects the United States through active inspections at ports of entry. In an effort to "push the border outward," CBP has now expanded operations to review and preclear cargo shipments at foreign ports prior to departing for the U.S. homeland. Many of CPB's programs and initiatives are designed to facilitate this preclearance activity (e.g., CSI, 24 hour rule, Security Filing 10+2).

- CBP has a strong base of industry partnerships and technology to safeguard the American public and promote legitimate international commerce (e.g., C-TPAT).

## U.S. DEPARTMENT OF HOMELAND SECURITY

"The Department of Homeland Security combined 22 different federal departments and agencies into a unified, integrated cabinet agency when it was established in 2002."[5]

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- DHS is the government agency whose mission is to:

  1. Prevent terrorist attacks within the United States
  2. Reduce America's vulnerability to terrorism
  3. Minimize the damage from potential attacks and natural disasters

- On March 1, 2003, the U.S. Customs Service was incorporated into DHS, officially becoming U.S. Customs and Border Protection, and thus DHS assumed responsibility for securing U.S. borders and transportation systems, which straddle 300+ official ports of entry and connects the U.S. homeland to the rest of the world.

- The department's first priority is to prevent the entry of terrorists and the instruments of terrorism, while simultaneously ensuring the efficient flow of lawful traffic and commerce.

## TRADE COMPLIANCE

Trade compliance is the process by which goods enter a country such as the United States in conformance with all laws and regulations, and it is a major concern of any company conducting international business. There are dozens of laws, regulations, and rules that have to be checked and complied with for every import or export transaction.

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Millions of shipments cross into the United States annually, providing the country with goods and services:

- On a typical day, 72,179 truck, rail, and sea containers are arriving at 328 ports across the United States.[4]

- In 2015, CBP processed approximately 33 million imports (entries) valued at more than $2.4 trillion U.S. dollars.[4]

Businesses violating trade regulations face fines of up to 40% of the value of the merchandise for "negligence," which can simply mean failing to keep certain necessary records.

## Trade Compliance Systems (or Global Trade Management Systems)

A trade compliance system is a database and software tool for monitoring and processing business activities and transactions in line with international trade laws and regulations enforced by various regulatory agencies.

Because of the complexity of international trade regulations, a trade compliance system has become a vital tool for every major importing and exporting company in the United States, and around the world. It is really the only way to keep current with all of the continuously changing laws, regulations, and procedures. A trade compliance system can automate the process of checking every transaction for commercial and noncommercial products against every legal regulation before import or export.

## Trade Compliance Systems Benefits

The benefits of implementing a trade compliance system include:

- Increased level of compliance compared to a manual process
- Decreased number of physical inspections by U.S. Customs and Border Protection
- Faster release of shipments by U.S. Customs and Border Protection
- Avoidance of fines, penalties, and delays
- Opportunity to interface with other systems

# GLOBAL LOGISTICS INTERMEDIARIES

The following are a few key global logistics intermediaries that companies may interact with to execute international trade activities.

## Customs Broker

"Customs Brokers are private individuals, partnerships, associations or corporations licensed, regulated and empowered by U.S. Customs and Border Protection (CBP) to assist importers and exporters in meeting Federal requirements governing imports and exports."[4]

Customs brokers are also described as "[a] person who manages the paperwork required for international shipping and tracks and moves the shipments through the proper channels."[1]


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A customs broker is typically the importer's only point of contact with the CBP, and advises the importer of record about the requirements for importing, including preparing and filing entry documents, obtaining the necessary bonds, handling import duties, tracking shipments, securing release of the goods, and arranging delivery to the importer's facility. The broker often consults with CBP to determine the proper rate of duty.

## Export Management Companies

Export management companies (EMCs) are agents for domestic companies in foreign markets. An EMC provides a manufacturer immediate access to foreign market knowledge and export know-how. They act as the exclusive export sales department for a manufacturer, and function in foreign markets just like a sales representative functions for a manufacturer in a domestic market.

## International Freight Forwarder

An international freight forwarder provides the expert know-how and experience needed to arrange for the movement of cargo from domestic points of origin to foreign destinations with maximum speed and efficiency. They have detailed knowledge of international transportation possibilities and limitations.

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As an agent of the exporter, the international freight forwarder advises the exporter about the regulations affecting foreign trade, as well as the import rules of various foreign countries. They prepare shipping documents, arrange for space on ocean vessels, arrange transportation of cargo to shipside, arrange for cargo insurance, and generally orchestrate the entire movement of goods from point of origin to destination in the most cost-efficient manner.

### *Non-Vessel-Operating Common Carrier*

A non-vessel-operating common carrier (NVOCC) is a "carrier that uses ocean liners and works similarly to freight forwarders."[1] An NVOCC does not own or operate any ocean vessels, but they are a shipper in relation to the ocean carrier involved. However, they do function as a common carrier by issuing their own bills of lading and assuming responsibility for the shipments they arrange. NVOCCs specialize in less-than-container load (LCL) shipments and perform many of the same functions as freight forwarders.

### *Trading Company*

"A company that introduces foreign buyers and sellers and arranges all product export/import details, documentation, and transportation."[1] In a strict definition, trading companies purchase and take ownership of products in one country and export these products to sell in another country.

## IMPORT PROCESS

An import is an item brought across a national border into a jurisdiction from an external source. The purchaser/owner of the item is the "importer of record." An import into the destination country is also an export from the origination country.

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Based on information provided by CBP:[7]

- It is the importer of record's responsibility to arrange for examination and release of the goods.

- When a shipment reaches the United States, the importer of record must file entry documents at the port of entry:

    1. Documents necessary to determine whether the item may be released from CBP custody
    2. Documents containing information for duty assessment and statistical purposes

- Following the entry, the shipment may be examined by CBP, or examination may be waived.

- The shipment can then be released by CBP if no legal or regulatory violations have occurred.

- Goods are not legally entered into U.S. commerce until:
    1. The shipment has arrived at the port of entry.
    2. Delivery to the shipping destination has been authorized by CBP (following submission and review of required documentation).
    3. Estimated duties have been paid.

CBP is also concerned with revenue collection (i.e., tariffs and duties). Revenue is determined by such items as:

- Correct valuation (price paid or payable)
- Correct classification
- Country of origin (COO)
- Correct identification of merchandise
- Correct identification of buyer and seller and whether or not they are related

### *Foreign Trade Zones*

Foreign trade zones (FTZs) are "areas supervised by U.S. Customs and Border Protection that are considered to be outside U.S. territory. Material in the zone is not subject to duty taxes, which are payable when the material is moved outside the zone for consumption. There is no limit on the time material may remain in the zone. Internationally, similar areas are called free trade zones."[1]

- FTZs are subject to the laws and regulations of the United States as well as those of the states and communities in which they are located.
- Foreign and domestic merchandise may be moved into FTZs for operations not otherwise prohibited by law, including storage, exhibition, assembly, manufacturing, and processing.

## EXPORT PROCESS

An export is "An actual shipment or transmission out of the United States, including the sending or taking of an item out of the United States, in any manner"[8]

- When an item/shipment is ready to be exported, the shipper will file export documents for the goods at the port of departure.
- Shipments must conform to export administration regulations.
- In order to complete the documents for filing, the shipper must:


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  - Know the product or technology being exported
  - Know where it is being produced
  - Know where and to whom it is being sent
  - Know who will use the product
  - Know whether there are any illegal restrictions in the order, L/C, or other document (e.g., boycott clauses)
- The shipper will complete and submit a shippers export declaration (SED), and submit a commercial invoice for the product.

## Deemed Exports

A deemed export is "any release in the United States of "technology" or source code to a foreign person is a deemed export to the foreign person's most recent country of citizenship or permanent residency."[8] including within the U.S. borders. Such a release is "deemed" to be an export to the home country of the foreign national.

An export of controlled technology can easily occur even within the walls of a company in the United States, intentionally or unintentionally, if the company has foreign nationals working at the location. Care and formal processes must be in place to prevent this type of disclosure without the proper licenses.

- "Technology" is defined as the specific information necessary for the development, production, or use of a commodity. Usually, the technology is even more strictly controlled than the commodity itself.
- The release can be visual, oral, through on-the-job training, systems access, website download, etc.

- The proper controls are needed to ensure that any such export occurs legally (i.e., with the proper licenses and approvals) and does not expose you or your company to penalties.

## PENALTIES FOR VIOLATIONS

The penalties for violating international trade regulations can be substantial and serious. There are criminal and administrative penalties as well as civil penalties for unlawful acts and statutory sanctions.

- **Criminal penalties** can reach 20 years imprisonment and $1 million per violation.
- **Administrative penalties** can reach the greater of $250,000 per violation or twice the amount of the transaction that is the basis of the violation.
- Violators may also be subject to **statutory sanctions**:
  - Seizure and forfeiture of items in violation, including the vessels and aircraft carrying the items
  - Loss of import and/or export privileges for a business unit, division, or for the entire company
  - Detailed inspections of every single shipment, and delayed release by U.S. Customs and Border Protection

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# Chapter 11

# Customer Relationship Management

## CHAPTER OUTLINE

# INTRODUCTION

**Customer relationship management (CRM)** is the transformation of the people, processes, and technology required to become a customer-centric organization; a philosophy of putting the customer first. It involves acquiring, retaining, and partnering with selective customers to create superior value for both the company and the customer. CRM is about building and maintaining profitable long-term customer relationships beyond the one-off buy and sell transaction. It provides a means and a method to enhance the experience of individual customers so that they will remain customers for life.

# WHY DO COMPANIES NEED CRM?


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Companies need a CRM program in order to (1) acquire new customers, and maybe even more importantly, (2) to retain their existing customers. Loyal customers are the source of most profits, and a relatively small percentage of those customers may generate most of the profits for the company. Companies can expect to lose approximately 50% of their customers every five years (Reichheld, 1996), so any effort to slow the rate of defection will grow the customer base. Satisfied customers tell others about their experiences; unfortunately, so do dissatisfied customers, who tell others about their experiences to an even greater extent. It typically costs five to ten times more to acquire a new customer, while the marketing costs and efforts are relatively low for retaining existing customers. "In general, the longer a customer stays with a company, the more that customer is worth. Long-term customers buy more, take less of a company's time, are less sensitive to price, and bring in new customers. Best of all, they have no acquisition or start-up cost. Good long-standing customers are worth so much that in some industries, reducing customer defections by as little as five points—from, say, 15% to 10% per year—can double profits" (Reichheld, 1996).

Additionally, a CRM program will help companies meet the changing expectations of customers in general due to aspects such as social and demographic factors, economic situations, competitor's products and marketing efforts, and other market experiences.

## GOALS AND BENEFITS OF CRM

You must have a clear set of goals in order to get the most from your CRM program. Making **customer satisfaction the primary goal of the CRM program** is the best way to improve the bottom line.

A successful well-designed CRM program can provide companies with many improvements and benefits. Some of the most important are:

1. Increased customer satisfaction
2. Increased customer loyalty and retention by offering value and service to encourage repeat business; competing on the service experience in addition to price
3. Better customer service and faster responses to customer inquiries
4. Increased customer revenue
5. Growth of the customer base through referrals
6. A simplified and more cost-effective marketing and sales process
7. Increase sales effectiveness; closing sales faster
8. Increased sales through cross-selling, and/or up-selling
9. Access to updated customer information in a centralized location and personalized customer interactions
10. Automation of repetitive tasks

## FOCUS ON STRATEGICALLY SIGNIFICANT CUSTOMERS

Not all markets and customers are equally important. Relationships should be built with strategically significant customers that are likely to provide the most value for the effort. Building relationships with customers that provide little value can be counterproductive.

Strategically significant customers fall into one or more of the following categories:

- Customers with high lifetime value (i.e., customers that will constantly buy the product[s] or use the service[s] in the long-term)
- Customers who serve as role models or benchmarks for other customers
- Customers who inspire change in the supplier and/or the supply chain

Companies should pursue developing and building customer relationships with customers who meet any of the abovementioned criteria.

## CRM LIMITATIONS

CRM is not feasible for every market and every customer. Some customers don't want to be committed to every brand and/or relationship. CRM is not practical for low-involvement, routine purchasing in B2B or B2C situations. Some markets/customers may have low "personalization potential." Therefore, as noted, companies should only focus their CRM program on strategically significant customers.


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## BUILDING AND MAINTAINING LONG-TERM RELATIONSHIPS

Of all the components of supply chain management, building and maintaining profitable long-term customer relationships is one of the most critical considering the fact that a company produces products and/or services to sell, and therefore, requires customers who want to buy those products and/or services. The long-term retention of those customers is a critical issue, which must be confronted by every organization that provides a product or service.

When considering the "what" and the "how" of CRM, the first important issue to focus on is, "*What* are the customer's requirements for delivering products and services in a manner resulting in a high level of customer satisfaction?" Customer expectations have been and are likely to continue rising for the foreseeable future, which in turn drives the need for customer satisfaction efforts to go well beyond just the actual on-time delivery and best price. Companies like Amazon help to fuel the escalation in customer expectations and shape customer satisfaction, because they can be thought of as "supply chain disruptors," continuing to challenge the norms and push against the traditional boundaries of the supply chain—setting the bar ever higher.

The "how" in CRM starts with **talking to the customer**, and even more importantly is supported by **listening to the customer**.

Companies won't be able to find out what customers want unless they communicate with them. They may choose to interact with customers directly or indirectly, or both. Companies can speak directly with customers in person or through a phone interview. Some companies may decide to conduct focus groups where small sets of customers are brought in and asked a series of questions to get their input and feedback. Companies may also opt to interact with customers indirectly by sending out a mail or electronic survey. Each of these communication methods has its pros and cons.

Understanding customer behaviors and their requirements is not just about collecting initial data and information; you have to collect that data over the long term, because as the market evolves and the business environment changes, customer behaviors and requirements change over time as well. It is important to analyze the data and information for trends. If you create a product or service and the associated support functions to satisfy customers today and allow it to stagnate, you may find out that somewhere in the not too distant future, your customers are no longer satisfied. CRM is an iterative and ongoing process, not a one-off exercise that you complete and put on the shelf. All elements of CRM should be considered fluid.

## BEING SUCCESSFUL

A CRM program is both simple and complex. It is simple in that it involves training users in treating customers right, to make them feel valued. It is complex in that it also means finding affordable ways to identify (potentially thousands if not millions of) customers and their needs, and then designing customer contact strategies geared toward creating customer satisfaction and loyalty among segments of customers. If you as the customer are satisfied with the product, the service, the treatment that you received from that supplier, you are likely to come back over and over again as a customer. Therefore, you become more valuable to that business.

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It has been well documented by several significant advertising agencies that one satisfied customer will tell at least five other people of the experience, whereas a dissatisfied customer in turn will tell 50 people about a bad experience.

To be successful, a company must find ways to meet its customer's needs; otherwise, just as any firm would react with a nonperforming supplier, the customer goes elsewhere and takes years' worth of future purchases along. Just as companies must create methods for finding and developing good suppliers, companies must also create methods for becoming and staying a good supplier themselves. Companies should evaluate themselves from their customer's perspective, as a supplier. In that light, you are the supplier to your customers and you need to do all the same things for your customers that you require and expect from your suppliers, if you want to be considered a top-quality, preferred supplier to your customers.

Because many companies do not sell their products directly to the end consumer, companies may also need to train and certify that their intermediate customers are able to adequately represent their company's products. If a company sells their products through a wholesaler, distributor, or retailer, then those entities are representing the company and their products in the marketplace. If they do not do the job adequately or appropriately, it will have a negative impact on the company. It is the manufacturing company's name on the product and their reputation at stake. Therefore, it is in the company's best interest to ensure that any downstream supply chain partners are appropriately informed, trained, and incentivized as necessary to ensure good customer service is provided and customer satisfaction is achieved.

## KEY COMPONENTS OF CRM

For a CRM program to be effective there are a number of components that must be developed and implemented as part of the program. The key components of a CRM program are outlined as follows:


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- **Predicting Customer Behaviors:** If a company is in the business of selling products and/or services to customers, they can also collect information from these customers' buying history, preferences, and trends, which could then be used to predict customer buying behaviors going forward. This information could also be used to determine how effective marketing efforts, advertising and promotions, and so forth, have been in the past, and whether these practices should be continued or altered for the future. This predictive information could be used by the company to potentially create a more accurate forecast and a more effective marketing and sales budget.

The current trend is to use predictive customer behavior modeling techniques, instead of just looking at historical data. These models use a mathematical construct to represent the common behaviors observed among segments of customers in order to predict how similar customers will behave under similar circumstances. The models are typically based on customer datamining, and each model is designed to answer one question at one point in time. If a model can be used to predict what a segment of customers will do in response to a particular marketing action, then the company should see that most of the customers in the segment responded as predicted by the model.

- **Personalizing Customer Communications:** Effective marketing that makes an impact on the customer is crucial to business success, but marketing is more than just advertising the company's products and services. It is about meeting the needs and expectations of customers through focused, personalized communications. A proven and effective approach involves ensuring that customers feel that their preferences and needs are being taken into consideration when they interact with a company. When a company communicates with their customers they need to use the customer's "language" and communicate with them in a meaningful way. Communication that is personalized sends a message to the customer that the company cares about the customer. It is a powerful way to differentiate the company from its competitors and it helps to build customer loyalty. In today's business environment, customers expect businesses to understand their needs and provide relevant and desirable information. They tend to apply the same principles when evaluating a business relationship as they do when evaluating a personal relationship. If the interaction is pleasing, engaging, and satisfying, then there's a good chance they'll build on that relationship through future interactions. The goal is to reach customers on an emotional level so that they feel a genuine personal connection with the company and their products and services, like a friendship. Once customers are comfortable in the relationship, they tend to remain loyal and even recommend others to the brand.

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Considering today's technology and the use of the internet in the buying habits of people through catalogs, etc., it is easy to track how customers navigate a website and the types of things they buy.

"Clickstream" is one way to do that. It is a method to track the parts of the computer screen a user clicks on while web browsing. It can help a company tailor a website's images, ads, or discounts based on past usage of the site. This type of process allows an organization to personalize its communications to the various customers not only to categorize the buying habits of customers in what they buy, but also when they buy, and at what price levels they buy.

- **Customer Segmentation:** "The practice of dividing a customer base into groups of individuals that are similar in specific ways relevant to marketing. Traditional segmentation focuses on identifying customer groups based on demographics and attributes such as attitude and psychological profiles."[1] In simple terms, it is grouping customers to create specialized communications about products. There are many different ways to group customers (by demographics, income, geography, buying preferences, etc.). Segmenting customers allows a company to zero in on a particular population of customers to sell a specific product, or to define a specific product(s) for a particular segment of customers. If a company can identify different segments of customers, it can potentially be more efficient and effective in the use of its resources by tailoring programs and initiatives for each segment.

- **Target Marketing:** A target market is a segment of customers toward which a company has decided to aim its marketing efforts and ultimately its products and/or services. A well-defined target market is the first element of any marketing strategy. Target marketing is the process of promoting products and services via media that are likely to reach the potential target market (i.e., customer segment), by building a marketing strategy aimed at that specific customer segment. It is usually much more effective than mass marketing, which tends not to focus too deeply on the qualities, preferences, or characteristics of the customer, and allows the company to focus efforts on marketing to those customers most likely to respond. Generally, it is a more efficient use of the company's resources and it reduces the chances of being a nuisance to those potential customers who do not fit the targeted criteria (i.e., the "wrong" customer segment).

- **Event-Based Marketing:** Event-based marketing is a form of marketing that identifies key events in the customer and business lifecycle. When an event occurs a customer specific marketing activity is undertaken. An event can be something basic and predicted, like the end of a contract, a holiday, a season, or something more detailed and personal, like a birthday, a mar-

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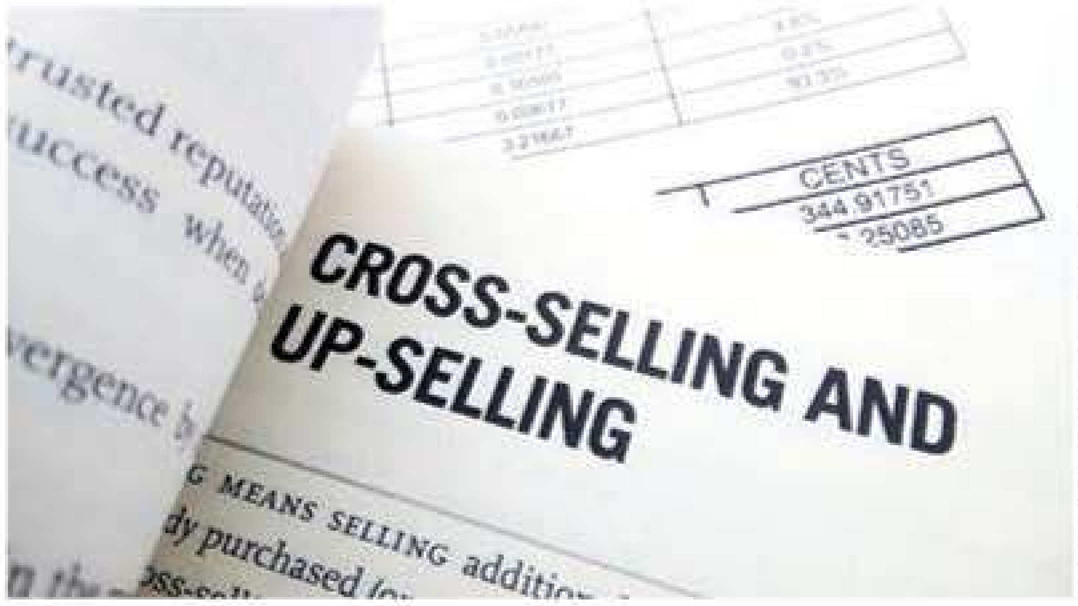
riage, or a graduation. Event-based marketing is a more personalized form of marketing, which can help to form personal connections with the customers. A great event-based marketing strategy allows you to respond to your customers at precisely the right moment. It can improve brand recognition and drive profits quickly and efficiently. Many company marketing programs are tied to specific annual events (e.g., Memorial Day, Fourth of July, Halloween, Black Friday, Cyber Monday, Christmas). Many companies also generate a significant amount of their annual revenue associated with these events. Companies such as Toys 'R Us make more than 50% of their annual sales in just the six weeks leading up to Christmas.

- **Cross-Selling and Up-Selling**

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**Cross-Selling:** I am sure that at some point we have all heard the famous cross-selling phrase, "Would you like fries with that?" Cross-selling occurs when a company sells an additional related or complementary product(s) or service(s) to an existing customer after the initial purchase. Example: If you're buying an item on Amazon.com, you may be shown other similar items to the one you are looking at, or companion products to the item that you are considering. Cross-selling can occur in a number of different ways. It can be blatant as in the examples above or it can be subtle as occurs in some stores. Examples: If you go to a grocery store to buy waffles or pancake mix, you may see the syrup on the shelf right next to it. If you go to a grocery store to buy coffee, you may see coffee filters, coffee creamer, stirrers, cups, and other related items in the same general area next to the coffee. On the one hand, it is a convenience to you because you may in fact have intended to buy some or all of those items anyway, but on the other hand it is still a form of cross-selling.


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**Up-selling:** You may have also heard the common up-selling phrase, "Would you like to super-size your order?" Up-selling involves persuading a customer to buy a more expensive item or upgrade a product or service to make the sale more profitable. It also involves selling the customer extra features or add-ons to the product he or she is already buying or considering. Incentives are crucial features of up-selling, because incentives such as discounts or free shipping give the customer good reasons to purchase something extra right away.

Not attempting to cross-sell or up-sell when the customer is already in a buying frame of mind is a wasted opportunity.

- **Relationship or Permission Marketing:** Relationship or permission marketing is an approach to selling products and services in which a customer explicitly agrees in advance to receive marketing information. Example: An "opt-in" e-mail, where a potential customer signs up in advance for information about certain products or services. The customer is giving permission to the company to provide them with marketing and sales information. Permission marketing is about building an ongoing relationship of increasing depth with customers. According to Seth Godin (who coined the term), "permission marketing is the privilege (not the right) of delivering anticipated, personal, and relevant messages to people who actually want them." Permission marketing does not typically create immediate sales, but rather grabs a customer's attention and preserves a business relationship.

  If you've ever accessed a website to buy something, you may have been requested to set up an account. You enter your information and somewhere, probably near the bottom, there is likely a little checkbox that asks your permission for the company to send you additional information, advertising, promotions, and the like, going forward. You can self-select in or out of that particular permission marketing program. Usually the box is already checked, and if you don't want to give permission, you can uncheck the box and self-select out of that marketing program. Some companies may also simultaneously or separately ask for your permission for their partner organizations to send you advertising and promotional information, and you can again self-select in or out of that marketing program as well. These examples are typical of how you can opt-in or opt-out of permission marketing programs. Another way might be for you to choose to use a QR code displayed on a product or on company advertising materials, to voluntarily find out more about the company or a particular product or service by using your smartphone and the internet. In that situation you are actively indicating that you want to find out more information, and you are using a mechanism that the company provided to self-select into (i.e., give your permission for) that marketing program.

- **Customer Defection Analysis and Churn Reduction:** Customer Defection Analysis is the process of analyzing the customers who have stopped buying to determine why. Churn is the process of customers changing their buying preferences because they find better and/or cheaper products and services elsewhere, and Churn Reduction is all of the efforts companies develop to stop losing customers to the competition. Customer defection analysis and churn reduction go hand in hand. It's important to determine why customers leave and then finding ways to retain them.

What is causing your customers to defect to your competitor? Is it because they don't like the quality of your product? Is your price too high? Is there some other service not being offered? Are you having shortages? Determining the root cause of your customer defections and then working to resolve those issues will help you retain customers.

You've already spent time and money identifying customers and getting them to buy. One of the worst things that can happen is to lose them as a customer. If you lose customers, you have to go out and replace them to stay in business. Replacing customers costs a lot of money. Finding a new customer costs on average five times as much as keeping an existing customer. You have to spend more money going out and identifying new customers and then getting those new customers to buy from you. According to *Harvard Business Review* (2006), a 5% improvement in customer retention can result in a 75% increase in profits. The more customers you can retain, the greater the profitability you will have as a result.

- **Customer Value Determination:** Determining the customer lifetime value is vital, so that appropriate communications, benefits, services, or policies can be established for each customer segment.

**Customer Lifetime Value** (CLV) is a prediction of the net profit attributed to the entire future relationship with a particular customer. Some customers are worth a lot more than others, and identifying your key or top-tier customers can be extremely valuable to your business. CLV is an important metric for determining how much money a company is willing to spend on acquiring new customers and how much repeat business a company can expect from particular customers. The CLV can affect many different areas of the business, because it emphasizes efficient spending to maximize customer acquisition and retention practices.


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## MANAGING CUSTOMER SERVICE

What is customer service? It can have multiple meanings even within the same organization. Generally, customer service is viewed in three different ways:

- **Customer Service as a Philosophy:** Customer service is a company-wide commitment to providing customer satisfaction through superior customer service by placing emphasis on quality and quality management.

- **Customer Service as an Activity:** Customer service is a particular task that a firm must accomplish to satisfy the customer's needs. Order processing, billing and invoicing, product returns, and claims handling are all typical examples of the customer service activity.

- **Customer Service as Performance Measures:** Customer service is a category of performance measures, such as the percentage of orders delivered on time and complete, and the number of orders processed within acceptable time limits.

For our purposes in CRM, we will define customer service as the process of ensuring customer satisfaction with a product or service. Often, customer service takes place while performing a transaction for the customer, such as making a sale or returning an item. It is the act of taking care of the customer's needs by providing and delivering professional, high-quality service before, during, and after the customer's requirements are met.

Customer service performance measurements are designed around the "Seven Rights Rule":

1. Right **product**
2. Right **quantity**
3. Right **quality**
4. Right **place**
5. Right **time**
6. Right **customer**
7. Right **costs**
8. Right **documentation**


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A newer customer service trend is to add on one more right, the Right documentation, which includes elements such as the right labeling, information, returns instructions, and invoice. This, combined with the other seven rights, is commonly referred to as the "perfect order." If a company can deliver on all eight rights, then it's creating the perfect order. Everything that the customer wants and everything that you as a supplier want to deliver is encompassed in the perfect order. Companies that can do this consistently are deemed to be providing excellent customer service.

These kinds of services only come at a significant cost, with a lot of planning, careful implementation, and appropriate and proper training of all personnel involved.

# CUSTOMER SERVICE—TRANSACTION ELEMENTS

When you complete a sales transaction, there are three different elements that you must consider as part of the transaction; the pre-transaction, the actual transaction itself, and the post transaction. Each element involves different aspects of customer service.

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- **Pre-Transaction Elements:** These are elements of the sales transaction that precede the sale, and include such things as the customer service policies, the company's mission statement, organizational structure, and system flexibility. Before any customer service can take place, the organization must first define its customer service policies. Organizations should have mission, vision, and value statements, and it is from these that its customer service policies are derived. The infrastructure (i.e., people, process, and technology) to support a company's sales must also be in place prior to the sales transaction to achieve the company's customer service goals. As with other aspects of the CRM program, this is not a one-off exercise. Organizations change and so do the needs, desires, and trends of the customer community. Therefore, all processes, customer service policies, and the systems that deliver customer service have to be designed and implemented with flexibility in mind to accommodate those changes as and when they occur.

- **Transaction Elements:** These are elements of the sales transaction that occur during the sale, and include such things as the order lead time, order processing capabilities, and the distribution system accuracy. It is during the actual sales transaction where the Seven Rights Rule outlined above is really implemented and measured. Nothing will destroy customer satisfaction faster than customers finding out that they cannot get their order(s) satisfied in an agreed upon length of time, or finding out that their order(s) was not filled accurately. Example: A customer identifies a specific item in the company catalog that spells out color, size, and item number, and then places an order. When the item is delivered the customer discovers that is the wrong color and the wrong size. The item number was correct on both the shipping label and in the catalog, but the item was improperly picked from stock, packaged, and shipped inaccurately.

- **Post-Transaction Elements:** These are elements of the sales transaction that occur after the sale, and include such things as warranty repair capabilities, complaint resolution, product returns, and operating information. In the age of e-commerce, post-transaction elements are becoming an even more important part of the CRM process. They must be carefully defined by the company with appropriate instructions for both the customer to understand at the time of the sale, and for the customer representatives within the company to understand at the time the customer contacts the company about an issue.

Hiring of appropriate staff and proper training are key elements in the success of post-transaction issues. A customer service representative has to be able to make judgment calls as to the level of service to be provided. There are times when an item may be out of warranty by only a short time and the customer service representative has to make a decision as to whether to accept or deny the customer's request for warranty. These types of decisions and interactions will have a significant impact on the long-term relationship with the customer.

## CUSTOMER SERVICE AND THE LOGISTICS FUNCTION

From the point of view of the supply chain management/logistics function, customer service can be described as having four traditional dimensions: time, dependability, communications, and convenience:

- **Time:** From the company/seller's perspective, the time dimension is the order cycle time. From the customer/buyer's perspective, the time dimension is the lead time, or replenishment time.
- **Dependability:** Dependability can be more important than lead time. The customer can potentially minimize its inventory levels if lead time is fixed and known.
  - Cycle time: A seller that can assure the buyer of a specific lead time, can differentiate the company and its product(s) from its competitors. A seller that offers a dependable lead time allows the buyer to minimize the total cost of inventory, stockouts, order processing, and production scheduling.
  - Safe delivery: If products arrive damaged or are lost, the customer cannot use the products as intended. A shipment containing damaged products aggravates several customer cost centers (e.g., inventory, production, and marketing) and negatively impacts the long-term relationship.
  - Correct orders: An improperly filled order forces the customer to reorder, assuming that the customer is not angry enough to buy from another supplier. If a customer who is an intermediary in the distribution channel experiences a stockout, the stockout cost also directly affects the seller.
- **Communications:** The two logistics activities vital to order-filling are the communication of customer order information to the order-filling function and the actual process of picking

the items ordered from inventory. In the order information stage, the use of EDI or internet-enabled communications can reduce errors in transferring order information from the order to the warehouse receipt.

- **CONVENIENCE:** Convenience is another way of saying that the logistics service level must be flexible. Basically, logistics requirements differ with regard to packaging, the mode of transportation, the carrier the customer requires, routing, and delivery times.

## CALL CENTERS

A Call Center is "a facility housing personnel who respond to customer phone queries. These personnel may provide customer service or technical support. Call center services may be in-house or outsourced."[1]


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A call center links a customer and an organization together. It gives customers quick access to the information they want and enhances the customer-to-business relationship. Call centers have helped most organizations focus on growing their business and concentrating on customer building. They can eliminate the need to hire and train new staff members to provide customer support, and thereby save money as well. Call centers help to continuously monitor different customer service parameters in an effort to gauge performance and ultimately improve quality and efficiency. Maybe most importantly, by utilizing a call center, the company's internal resources can be freed up to focus on the company's core competencies.


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Call centers have become a significant part of the CRM program in many companies. A call center can actually handle a number of different activities/tasks. They handle basic tasks like answering customer's inquiries and resolving customer's issues. They can also categorize the calls (placing orders, information, complaint, question, request for repair, etc.). Data collected by the call center can be used to determine such things as how long it takes to answer a call, how long it takes to resolve an issue, or to track the type and frequency of issues or inquiries. Call centers can use information collected to help determine the root cause of issues that might be occurring on a frequent basis. A properly designed database for gathering the information from a call center can support demand forecasting for future sales as well as manufacturing requirements and resource allocations.

If they are well set up and managed, call centers can increase customer satisfaction levels. One of the most successful customer service call centers is that of the Lands' End Company, where customer service satisfaction levels over the years have been among the highest in the country. They can also decrease customer satisfaction levels if you don't do them well. As positive as good customer satisfaction can be, equally bad customer service can clearly destroy a company's reputation even faster. In today's business world, the internet has provided an immediate source for customers to not only complain but to tell the world through social media how bad service was in a given situation with any company. "There's nothing worse than calling your service provider and finding out you know more than the person on the other end of the line," said Neil Armstrong, marketing director at UK broadband service provider PlusNet.

## ADDITIONAL COMPONENS OF CRM

### *Measuring Customer Satisfaction*

Measuring customer satisfaction is about customers being given opportunities to provide feedback about product(s), service(s), the organization, and so forth. Depending on the types of products and services offered, there is potentially a significant amount of information to be captured and analyzed. This can be done through surveys, questionnaires, and in many cases direct phone calls to customers asking them their opinions on the service they have been provided. Most companies will need some type of a database to manage the data. Decisions have to be made regarding how to capture the data, and how to analyze the information so you can use it productively going forward. It is of very little value until it can be analyzed and acted upon.

### *Website Self-Service*

Websites act as support mechanisms for call centers. Many companies provide these portals for customers to be able to access their account information, check operating hours, ask questions, see product information, find contact information, check on placed orders, and get shipping information. Customers can not only access this information but in some cases, edit and modify the information accordingly. Customers can put their own customer information into the system, to save on company time and to potentially eliminate errors. These sites also allow for customers to opt out of future emails and information they may not wish to receive, and conversely, it allows the customer to access or opt into future sales, subscriptions, and corporate information if desired.

## *Field Service Management*

Field service management involves setting up the company operations to allow customers to interact directly with the company's service personnel. Customers can call the service people directly and make an appointment with the service person to come out to service the product. Because customers are communicating directly with product specialists for service issues, it is more likely that the right diagnosis can be made quickly, which will help to ensure customer satisfaction.

## *Sales Force Automation*

Sales force automation (SFA) tools are used for documenting field activities, and keeping track and managing what your sales force is doing in the field. These tools provide communication with the home office, and facilitate retrieving sales history out in the field. Depending on the type of product or service, the company may have a huge sales force. There are many different tools and mechanisms that management can use to manage a sales force.

The following are a few examples:

**Sales Activity Management:** Tools that offer sales reps a guided sequence of sales activities, in addition to the fact that it provides a stepwise approach on how to sell the company's products and/or services. If there is a series of sales activities that the sales reps have to go through, the tool can help to make sure sales reps take all the steps that are appropriate, including documentation. It can also be used to capture new buying habits from a customer, new customer contact information, new location information, or new phone numbers.

**Sales Territory Management:** Tools used by sales managers to obtain information on each sales rep's activities. These tools identify which sales reps are productive and which ones are not in terms of generating sales, how many sales calls they make per day/week/month, whether they distributed the sales and product information they were supposed to leave, whether they scheduled a follow-up appointment, and so forth. All that information can be captured and used by sales managers or district managers to manage the sales force. If there is a certain segment of customers that are not being adequately covered, sales managers can use this information to redirect some of the sales force to that customer segment.

**Lead Management:** A technique used to help sales reps follow some specific tactics that will help them close the deal. Example: If you are trying to sell a particular commodity and the customer is not ready to make a buying decision, what techniques have worked in similar situations in the past which the sales reps could use to try and close the deal? Do they offer the customer free delivery, extended financing, a discount? There may be many tactics or activities that a sales rep could use to try to close a sale and these may vary by customer segments. Understanding what those tactics are and what tactics work on which customer segments is all part of lead management. This could be a significant amount of information to manage and a tool and database may be needed to be able to provide that information to your sales force.

**Knowledge Management:** It is basically a database and software tool to manage all of the above, plus more. This is could be a significant amount of information about your customers, your company's sales policy, warranty information, even things like expense reimbursement. A company may have several different types of software packages that need to be integrated. A knowledge management tool will help to do this, so sales reps and management can have immediate access to all that information. A tool that enables quick decision making, better customer service, and a better-equipped and happy sales staff makes for a much more effective and satisfied sales team.

## SIX STEPS TO A SUCCESSFUL CRM PROGRAM

### *Step 1: Creating the CRM Plan*

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The first step to a successful CRM program is to create the CRM plan itself; that is, do all of the planning. It's important to address the following questions: What are the objectives of the program? What am I trying to achieve? Does it fit with my corporate strategy? It is important for the plan to have flexibility because the market and the customer world will change periodically based on the demographics, the nature of the product, the time of year, and so forth.

The plan should consider that the CRM program will likely need some type of software application(s) to help manage the program and all the information. The software tools will have to be identified, purchased, developed, and implemented. This may also require that the company's legacy systems are integrated or replaced. It is not unusual for the technology currently being used to change frequently and require upgrades and modifications to meet the needs of an evolving CRM program.

The CRM program, process, policies, and tools should be reviewed on a regular basis and upgraded based on changes to product service requirements, warranties, guarantees, and how these should be managed by a CRM staff.

To implement a CRM program an organization has to understand that there are costs involved in hiring the right people, and that it will take time to train and prepare staff for CRM positions. Equally, it will take time for implementation of any new system(s) and upgrades along with educating new employees on CRM practices, policies, and procedures.

## Step 2: Involve CRM Users from the Onset

The second step is to involve the people who are actually going to be working with the CRM system(s) right from the very beginning. It actually might create a lot of controversy within the company if you set up a CRM program and people are not aware of how it could impact their jobs. They may feel threatened and there will likely be some resistance.

Getting the people who are actually going to be working with CRM system(s) involved will help in several ways:

a. They have the most information and this will most likely help you set up a better system.

b. They will potentially feel less threatened because they will understand more about what's happening directly.

c. They will start to take ownership. They will feel it is their system that is being implemented, not something being imposed on them.

d. You will get some early buy-in upfront and potentially need less training later on.

Many companies will do a pilot or test before doing a full implementation. They don't want to expose the entire company, their entire product line, or all their customers to a new process or untested system, so they do a small test to make sure everything works before they move on to expand it to all their products in their portfolio.

## Step 3: Select the Right Application and Provider

The third step is selecting the right application and the right provider. There are lots of different potential applications and software packages out there to pick from. You will have to find an appropriate application and determine the extent of customization. Some of the best ways to get information on what is available, and to begin the evaluation process, is to visit tradeshows, read literature, and/or hire a consultant. It may be wise to have a company team of cross-functional individuals help define not only the requirements for a CRM program, but also to work as a focus group in finding an application that will satisfy the requirements as defined by that focus group. Then identify the potential alternatives out there and do some comparisons based on how well the system performs, security, reporting, capabilities, and system availability, before making a final decision to purchase and implement.

### Step 4: Integrate Existing CRM Applications

The fourth step is integrating any existing CRM systems. This can be a major time-consuming undertaking. CRM is generally a collection of various applications implemented over time, both new and legacy. Your existing CRM applications (if any) will already have customer information, product information, and other data that will be needed in any new application that you install. Customer contact mechanisms need to be coordinated so that every CRM user in the firm knows about all of the activity associated with each customer. You may have some centralized database or a data warehouse containing all customer information. You want to be able to take that data, easily access it, synthesize it, and analyze it so that you can use the data to benefit your business going forward. There's no sense collecting a lot of data if you can't use it to actually improve your business.

It would be highly unlikely for the company to buy a new application, customize it to meet its needs, and then immediately implement it and have it work exactly as expected. Checking for errors during implementation and integration and maintaining the current business at the same time is an exceptionally difficult task. Therefore, it is likely to require a significant team of well-trained personnel to integrate any new systems along with support from the provider.

### Step 5: Establish Performance Measures

The fifth step is to establish performance measures. This allows the firm to determine if objectives have been met, and to compare actual to plan variances so that corrective actions can be taken if necessary. What are the objectives of the program and are they being achieved?

### Step 6: Providing CRM Training for All Users

The sixth step is to provide training for all users of the CRM program and tools. You will need to have the initial training for all users, and you will need to have ongoing training when changes are made, upgrades, etc. Potentially, you will also have new employees over time and they will have to be trained as well. One mistake that companies make is that they do the initial training, but they don't have a budget and program set up for ongoing training. What happens is that the program starts to fail, and they end up blaming the system rather than recognizing that they don't have a key process in place.

You can also use the training to convince key users such as sales, call centers, and others, of the value of the CRM program. The training not only provides information on how to use the program, but it will also show them the value of the system itself. You can use the training to take people who are not early adopters (i.e., those who are resistant to the system) and help them get on board with the system and become productive members of your organization in the new environment.

# CURRENT TRENDS IN CRM

## Customer Data Privacy

Privacy is one of the current trends in CRM. You may have personally received privacy notices in the mail from some account that you have or from a supplier. They state things like "we collect certain information from you, but we don't share that information outside of our organization or with our trading partners," for example. People and organizations are understandably worried about giving out personal or confidential company information. Protecting customers' data and information is critical. There are rules and laws that companies must follow regarding invasion of privacy. These include the U.S. Patriot Act and EU's Internet Privacy Law. One of the elements to consider when you're looking at an application or a system, may be the security features. What type of security does that system have?

## Social Media

Many companies have expanded the use of social media. Creating and cultivating virtual communities around product or brand is a powerful way to engage customers in terms of selling and advertising, in providing information to customers, and also getting information back from customers on their buying preferences and requirements.

## Cloud Computing

Cloud computing is basically an alternative to buying the software package. You can actually buy "software as a service" through the cloud instead of purchasing the actual CRM software. Therefore, if there are upgrades, maintenance, and the like, you don't have to go through the expense and exercise of actually doing the upgrades and maintenance yourself. The company that is managing the software in the cloud will actually do those activities. Many companies will start out this way, because it's a way to "dip your toe in the water" without getting fully immersed. You can make sure that the system works for you, performs as you expect it to perform, and gives you the value that you are expecting before making a major investment.

# SUMMARY

- Customer relationship management (CRM) is the transformation of people, process, and technology required to become a customer-centric organization; a philosophy of putting the customer first. It involves acquiring, retaining, and partnering with selective customers to create superior value for both the company and the customer.

- Companies need a CRM program in order to (1) acquire new customers, and maybe even more importantly, (2) to retain their existing customers. Loyal customers are the source of most profits, and a relatively small percentage of those customers may generate most of the profits for the company.

- You must have a clear set of goals in order to get the most from your CRM program. Making customer satisfaction the primary goal of the CRM program is the best way to improve the bottom line.

- Relationships should be built with strategically significant customers that are likely to provide the most value for the effort.

- CRM is not feasible for every market and every customer. Some customers don't want to be committed to every brand and/or relationship.

- Of all of the components of supply chain management, building and maintaining profitable long-term customer relationships is one of the most critical considering the fact that a company produces products and/or services to sell, and therefore, requires customers who want to buy those products and/or services. The first important issue to focus on involves the customer's requirements for delivering products and services in a manner resulting in a high level of customer satisfaction. It starts with talking to the customer, and even more importantly listening to the customer.

- CRM involves finding affordable ways to identify customers and their needs, and then designing customer contact strategies geared toward creating customer satisfaction and loyalty among segments of customers. Just as companies must create methods for finding and developing good suppliers, companies must also create methods for becoming and staying a good supplier themselves.

- Key components of CRM:

  - <u>Predicting Customer Behaviors:</u> If a company is in the business of selling products and/or services to customers, it can also collect information from these customers' buying history, preferences, and trends, which could then be used to predict customer buying behaviors going forward.
  - <u>Personalizing Customer Communications:</u> Is about meeting the needs and expectations of customers through focused, personalized communications. A proven and effective approach involves ensuring that customers feel that their preferences and needs are being taken into consideration when they interact with a company.

- Customer Segmentation: Grouping customers to create specialized communications about products.

- Target Marketing: The process of promoting products and services via media that are likely to reach the potential target market (i.e., customer segment). Targeted marketing builds a marketing strategy aimed at that specific customer segment.

- Event-Based Marketing: Is a form of marketing that identifies key events in the customer and business lifecycle. When an event occurs, a customer-specific marketing activity is undertaken.

- Cross-Selling and Up-Selling: Cross-selling occurs when a company sells an additional related or complementary product(s) or service(s) to an existing customer after the initial purchase. Up-selling involves persuading a customer to buy a more expensive item or upgrade a product or service to make the sale more profitable. It also involves selling the customer extra features or add-ons to the product they are already buying or considering.

- Relationship or Permission Marketing: Is an approach to selling products and services in which a customer explicitly agrees in advance to receive marketing information.

- Customer Defection Analysis and Churn Reduction: Customer defection analysis is the process of analyzing the customers who have stopped buying to determine why. Churn reduction is all of the efforts companies develop to stop losing customers to the competition.

- Customer Value Determination: is determining the customer lifetime value so that appropriate communications, benefits, services, or policies can be established for each customer segment. Customer lifetime value (CLV) is a prediction of the net profit attributed to the entire future relationship with a particular customer.

• Customer service is a philosophy, an activity, and a performance measure. Customer service performance measurements are designed around the "Seven Rights Rule": The right product, quantity, quality, place, time, customer, and costs. A newer customer service trend is to add on an eighth right, the right documentation. This, combined with the other seven rights, is referred to as the perfect order.

• When you complete a sales transaction, there are three different elements that you must consider as part of the transaction; the pre-transaction, the actual transaction itself, and the post-transaction. Each element involves different aspects of customer service.

• From the point of view of the supply chain management/logistics function, customer service can be described as having four traditional dimensions: time, dependability, communications, and convenience.

- A call center links a customer and an organization together. It gives customers quick access to the information they want and enhances the customer-to-business relationship. Call centers have helped most organizations focus on growing their business and concentrating on customer building.

- Measuring customer satisfaction is about customers being given opportunities to provide feedback about product(s), service(s), the organization, and so forth.

- Website self-service functions act as support mechanisms for call centers. Many companies provide these portals for customers to be able to access their account information, check operating hours, ask questions, see product information, find contact information, check on placed orders, and get shipping information.

- Field service management operations allow customers to interact directly with service personnel.

- Sales force automation tools are used for documenting field activities, keeping track, and managing what your sales force is doing in the field. These types of tools include sales activity management, sales territory management, lead management, and knowledge management.

- The six steps to a successful CRM program include creating the CRM plan, involving CRM users from the onset, selecting the right application and provider, integrating existing CRM applications, establishing performance measures, and providing CRM training for all users.

- Current trends in CRM involve such aspects as customer data privacy, social media, and cloud computing.

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# Chapter 12

## Supply Chain Management in the Service Industry

### CHAPTER OUTLINE

Introduction
Service Supply Chain versus Manufacturing Supply Chain
Types of Services
Service Productivity Challenges
Global Services
Service Strategies
Service Delivery System
Service Response Logistics
Distribution Channels
Service Quality

## INTRODUCTION

Throughout this text we have been focusing on supply chains that produce a physical product, but supply chains exist in the service industry as well. Service firms offer intangible products, meaning products that do not have physical dimensions. What customers are actually paying for in the service industry is the labor and the intellectual property of the service provider. While the service itself is not tangible, it likely involves use of, or work on, a tangible item. For example, we do not pay a dry cleaner for a shirt; instead, we provide our own shirt and pay the dry cleaner for the service of cleaning the shirt. Examples of service products include insurance, healthcare, entertainment, finance/banking, training/education, transportation, warehousing, and business consulting.

Because the nature of service products is so significantly different from physical products, the supply chain models for service products operate differently from those of physical products. Service products cannot generally be produced in advance or inventoried, and frequently the customer of a service provides the tangible item that will receive the service (e.g., a car for automotive repair, hair for a haircut, carpets for cleaning). Customers play a vital and more involved role in the delivery aspect of the service supply chain than they do in the supply chain for a physical/tangible product. Customers supply clothes to the dry cleaner to be cleaned, their refrigerator to the appliance repair shop to be serviced, and themselves to the healthcare provider to receive checkups and treatment. These types of services are said to provide state utility, meaning that the service is performed on something that is owned by the customer. In this context, without the customer also being a supplier in the service supply chain, the service could not be delivered. Consequently, in the service supply chain, it is much more about managing the relationships between the trading partners than it is about managing the chain of supply.

## SERVICE SUPPLY CHAIN VERSUS MANUFACTURING SUPPLY CHAIN

How does supply chain management in the service industry differ from supply chain management in manufacturing?

- **Tangibility:** Unlike manufactured products, services are <u>not</u> tangible (i.e., they cannot be seen, weighed, or measured, and you can't touch them in the same manner as tangible products that have physical dimensions). Service intangibility also presents the problem of customers not being able to try out and test a service before purchase. Unlike a product innovation, a service innovation cannot be patented, so a new concept must expand rapidly before competitors can copy the new service offering.

- **Labor Content:** There is a much higher ratio of labor to materials in the service industry.

- **Customer Involvement:** Customers are much more directly involved in the service process than with manufactured goods. Services typically require direct interaction with a customer for the service to be completed or delivered. Customer satisfaction happens in real time with the customer witnessing and taking part in the process. Services can be customized to provide "a personal touch" so the customer feels that the service they are receiving is specifically for them. The use of a customer's name is still one of the most significant factors when engaging a customer. Most of us have at one time or another gone to a restaurant and paid with a credit card, but how many times did the wait staff look at your name on the credit card, and thank you by name when returning with the check to be signed? Customization can be simple and leads to customer satisfaction.

- **Assessment of Quality:** Quality is assessed differently in the service industry. Each customer and each service provider are different. Services are often unique to the customer (insurance policies, legal services, tax preparation, etc.). Defining service quality can be highly personal, and it can therefore vary from one customer to the next. Services can often change weekly, daily, or even hourly. Goods are generally produced to meet precise specifications and in most cases do not change very often.

- **Perishability:** For the most part, services are simultaneously produced and consumed. They cannot be saved, stored, returned, or inventoried. A service company may use inventory management techniques for managing items that facilitate providing the service, but not for the service itself. This also leads to the challenge of planning for services as it is very difficult to ensure a high level of customer satisfaction if you cannot rely at least in part on having an inventory of services available to buffer for variability in demand or supply.

- **Location Considerations:** Services are decentralized due to the inability to inventory and/or transport service products. Tangible goods are frequently produced in a location that is remote from the customer, whereas in most cases services require a well-designed customer-oriented facility in order to meet a customer's needs. Services are largely provided very near to where the customers are located, and are therefore heavily impacted by location decisions.

## TYPES OF SERVICES

Service offerings can typically be categories into three service types:

1. **Pure Services:** Services offering very few or no tangible products to customers (e.g., consulting, storage facilities, training/education)

2. **End Products:** Services that offer tangible components along with the service component (e.g., restaurants; food along with the dining service)

3. **State Utility:** Services that directly involve things owned by the customer (e.g., car repair, dry cleaning, haircut, healthcare)

## *The Goods–Services Continuum*

Almost every product offering is a combination of goods and services. Figure 12.1 illustrates this concept along a continuum spanning from Pure Goods to Pure Services.

- **Pure goods** are generally low-margin commodity businesses that, in order to compete against one another, often add some services (e.g., extended warrantees, consulting).

- **Core goods** suppliers provide a significant service component (e.g., spare parts, repairs) as part of their businesses.

- **Core services** suppliers must integrate tangible goods (e.g., cars for rental, food at a restaurant, planes for air travel) in order to provide their services.

- **Pure services** do not need much in terms of facilitating goods, but what they do use is essential to providing the service, thus facilitating goods (e.g., software, diagnostics tools).

**FIGURE 12.1**

| Pure Goods | Core Goods | Core Services | Pure Services |
|---|---|---|---|
| Food products | Appliances | Hotels | Teaching |
| Chemicals | Data storage systems | Airlines | Medical advice |
| Book publishing | Automobiles | Internet service providers | Financial consulting |

Goods ← → Services

*(Anders Gustofsson and Michael D. Johnson, 2003)*

## SERVICE PRODUCTIVITY CHALLENGES

In manufacturing, optimization of the supply chain is accomplished primarily by improving the speed of delivery and by reducing costs. Companies work to reduce bottlenecks and inventory, and try to negotiate better pricing on raw materials. The main way to speed production is to find a faster way to move or manipulate the component materials.

A research paper published by Eastern Illinois University points out that the main drivers of optimization in a service model are relationships and information flow. By eliminating bottlenecks caused by duplicate approvals or other intangible delays, a service company may be able to realize the same goal as the manufacturing company: a lower-cost product, delivered to the customer more quickly.

The following are some of the challenges encountered when attempting to improve productivity in the service industry.

1. **High Labor Content**

   Most service offerings are almost entirely labor with very little, if any, materials. As a result, it may be more difficult to make improvements in productivity because the labor component is harder to improve than a material component. There may also be more people involved in providing the labor effort, each with their own knowledge and expertise. A significant part of service quality is predicated on the skill and ability of the person who's providing the service, rather than on the quality of the material and the design of the product, as in a manufacturing supply chain. Each person providing a service is unique and will likely bring different skills and experiences into the process. Not all lawyers, doctors, dry cleaners, service repair technicians, for example, are equal, and some may perform better than others.

2. **Individual Customized Services**

   Because many service offerings are unique and customized for a specific customer (tax returns, legal services, healthcare, etc.), a service provider may not be easily able to improve beyond the standard approach simply by using knowledge and information gained over time, and best practices. While small incremental improvements can be made to the basic service, the customized nature of many service offerings limit improvement efforts. What worked before may not necessarily work with the next customer.

3. **Difficulty of Automating Services**

   It is also difficult to improve productivity through automation in the service industry. In manufacturing, significant productivity improvements can be made by using automation to increase speed and reduce throughput times and costs. These opportunities are limited when providing many of the services being offered, partially due to the high level of customization in the service industry. For instance, how does a service provider automate customized legal services, or financial consulting?

In some cases, a service provider may be able to automate parts of a service such as making/taking reservations or appointments, or by the use of more technology and automation in supporting functions and facilitating goods used to help provide a service. These measures will certainly help, but may not appreciably improve the productivity.

4. **Problem of Assessing Service Quality**

Because services are often unique to the customer (insurance policies, legal services, tax preparation, etc.), service quality can be very subjective, creating problems assessing the quality of the service. Defining service quality can be highly personal, and vary from one customer to the next. If the service provider can't determine what service is good and what service is not good, until it is delivered to the customer, it makes it difficult to identify where improvements are needed.

Another problem in assessing service quality is getting the customer to respond to feedback requests. Offering some form of additional benefit may help to entice a response from the customer. There are also customers that are afraid to respond to bad service because of an attitude presented by the service provider or representative. It is imperative that personnel in the service industry are properly trained and educated on both the service they are offering and how to properly and professionally interact with customers. Appropriate to this situation, Warren Buffett has been quoted as saying, "It takes 20 years to build a reputation and five minutes to ruin it."

## GLOBAL SERVICES

Historically, most services were unique to the local market. Recently, the industry has seen the growth of services occurring worldwide, opening up new markets and challenging companies to manage services in a global environment. Many companies that were providing services in one market are now expanding and providing those services in other markets as well. This creates challenges as markets vary significantly. A manufacturer is likely to be able to offer the same exact product in every market it serves, but a service provider may not be able to offer the same exact service in every market.

Some of the reasons for this challenge are:

- **Competition:** Service providers expanding into global markets must be aware of local competition and the services the competition is already offering. Can the expanding service provider offer a competitive advantage over these domestic companies? On what components of the service offering will they compete; price, quality, speed, capabilities? What is the business environment around the specific service(s) that will be provided in that market? Are there rules of engagement or business practices that a service provider needs to understand when moving into a new global market? There may be formal and informal ways of doing business in various countries. Competition in the service industry is significant, and customers looking for service will readily compare one organization to another. For an organization to survive it is important to be fully cognizant of what the competition is doing and what capabilities they have to offer.

- **Customers:** A service provider needs to identify where potential global customers are before deciding to expand the business globally. Customers for a particular service may not necessarily be in every market, or in large enough numbers to sustain the global expansion. An overextension to weaker markets can be a huge drain on resources. Being selective will help to use resources wisely. Service offerings may also need to be modified or customized for specific markets and customer segments.

- **Government:** Expanding globally means understanding local regulations and legal requirements. Some markets are more open than others, and some are very restrictive. Governments may adopt a protectionist strategy and erect barriers such as taxes and tariffs on foreign companies in order to maintain an advantage for local companies. These barriers may discourage foreign companies from entering the market, or if they do enter the market, provide the government with additional revenue. Some countries may require foreign companies to partner with a local company, or even with the government itself, in order to do business in that market. This could be a hindrance, or it may be a benefit if the foreign service provider is not familiar with the local market.

- **Infrastructure:** Infrastructure varies by country. Markets have differing qualities and types of suppliers, facilities, transportation, communications, and institutions available to support a service provider. The variances can be so significant that it precludes the quality of service response needed to maintain a significant economic position in that market. A service provider may need to modify its service offerings according to the resources available.

## Franchising

Franchising is an arrangement where one party (the franchiser) grants another party (the franchisee) the right to use its trademark or trade name as well as certain business systems and processes, to produce and market a good or service according to certain specifications. It can provide an easy way to develop and grow an organization particularly when expanding internationally:

- "Allows services to expand quickly into dispersed geographic markets"[2]
- "Protects existing markets"[2]
- "Builds market share"[2]
- Facilitates expansion when the owners have limited financial resources[2]

## SERVICE STRATEGIES

A company providing services, just like a company manufacturing a product, must adopt a strategy that it believes will lead to success. A sound strategy enables a service provider to consistently outperform competitive alternatives over time, across business cycles, industry disruptions, and changes in leadership.

In order to select the best strategy, a company should explore some key strategic questions, including:

- What markets will be served, and what is the opportunity in those markets?
- What are the potential customers' wants and needs?
- How does a company's current service capabilities align to customer needs?
- What service solutions will deliver the highest customer value and loyalty?
- What role does the company want to play in this market with these customers?
- What strategies are required to capture a leadership position and achieve goals?
- What services and delivery processes should be deployed?
- What systems and support processes should be implemented?
- What factors will determine success or failure?

Companies in the service industry may choose to adopt a version of one of the following three strategy types.[2]

## *Differentiation Strategy*

A differentiation strategy calls for the development of a service(s) that is unique from that of the competition. Approaches to differentiation include developing unique brand images, unique technology, unique features, unique channels, unique customer service, and the like. In other words, the key to differentiation is obtaining an advantage over your competitors that is perceived by the customer as valuable. Collecting feedback and input from the customer base is generally the best way to identify a differentiating aspect of the service offering that customers will value. If the differentiating aspect of the service is truly valuable, customers will be more willing to pay for it. Example: Sunday car servicing. Most car servicing facilities are only open Monday through Saturday. Offering car servicing on a day that competitors aren't may help serve customers that couldn't otherwise take advantage of that service, because they are not available to bring the car in for servicing during the regular work week. This differentiation strategy sets the service provider apart from competitors and potentially increases business as a result.

## *Leadership Strategy*

A leadership strategy involves establishing the company as the market leader by providing the best service at the lowest cost. This strategy may require a large capital investment in state-of-the art equipment, the newest and most efficient technologies, and significant efforts to control and reduce costs. Example: Auto diagnostics software. If the service provided is auto repair, and the service provider has a leadership strategy, the company will need to use less labor and complete repairs faster to be able to keep costs low. One way of doing this might be through the use of some automated equipment and software to help speed up the process of diagnosing the issue before repair, leading to less labor used, less chance of an error in diagnosing the issue, less delay, which leads to faster repairs and lower cost.

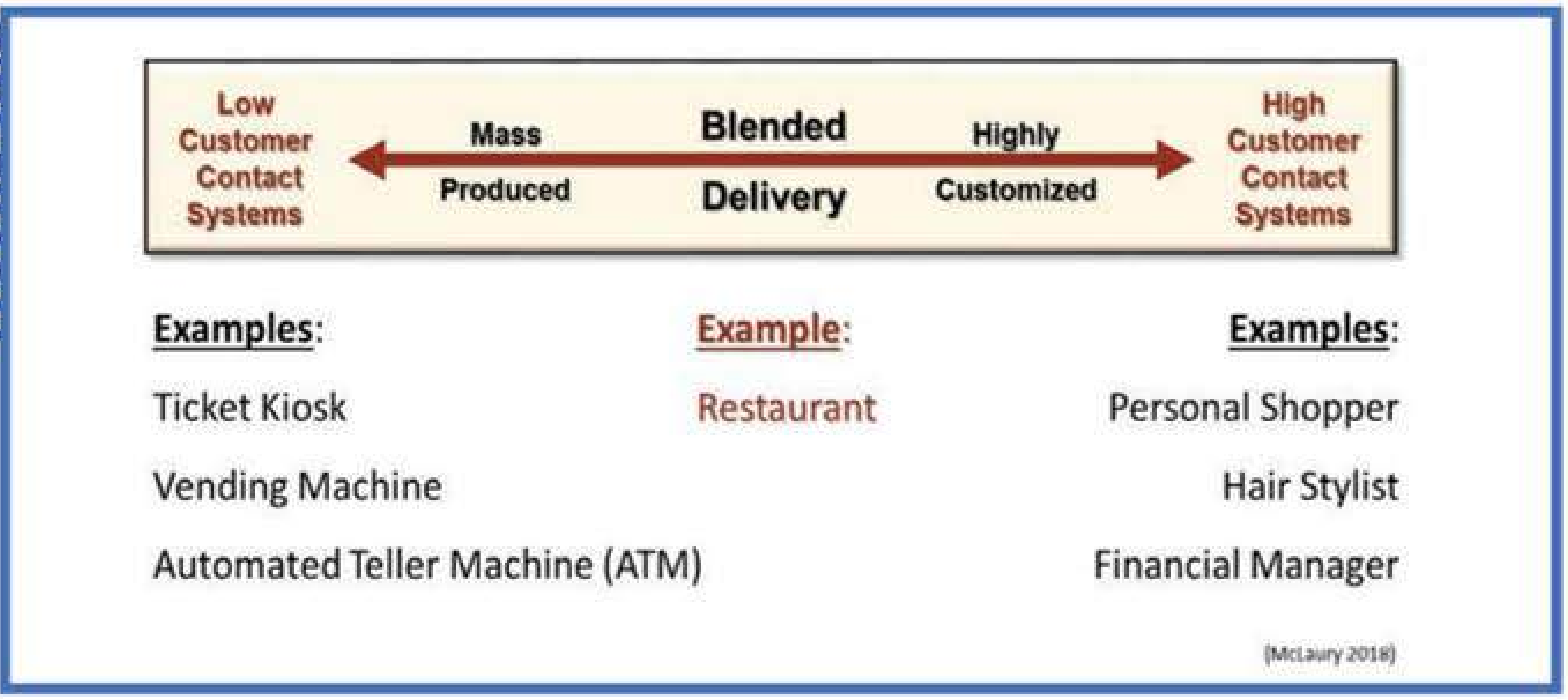
## *Niche Strategy*

The niche strategy involves focusing the service offering on a narrow area and customer base in order to become extremely proficient at providing that particular service. An organization that wants to succeed in service response has to be strong in its market expertise and be better and more responsive than the competition. This strategy allows for high customization and personalized service, where the service provider may be the only company providing that service in that area. Example: A mechanic who specializes in repairing just one type of automobile, usually a high-end model. It is a service offered only to customers that have that type of automobile. The mechanic focuses all effort and expertise on this niche area and becomes extremely proficient at it.

# SERVICE DELIVERY SYSTEMS

The delivery of services can be expressed as a continuum with mass produced, low-customer contact systems such as a ticket kiosk, vending machine, or ATM, at one end, and highly customized, high-customer-contact systems such as a personal shopper, hair stylist, or financial manager at the other end. See figure 12.2.

FIGURE 12.2




Every service offering falls somewhere along the continuum; however, some service offerings have components of both ends of the continuum blended together.

- **Example:** Restaurant
  - Front of the house staff (e.g., hostess, waiter) are high customer contact.
  - Back of the house staff (e.g., chef, dishwasher) are low customer contact.
- Service delivery systems may be designed to keep these separate in order to use various and different management techniques to maximize performance in each area.

Regardless of where on the continuum a service offering falls, the service delivery system should be audited often to assess performance and make improvements.

## *Bundle of Service Attributes*

The bundling of service attributes such as explicit and implicit services, along with facilitating goods and supporting infrastructure, can help to enhance customer satisfaction. An example of commonly bundled services is in the banking industry.

- **Supporting Infrastructure:** Includes location, decoration, layout, architectural appropriateness, equipment, etc.
  - Banking Industry Examples: drive-up tellers, ATMs
- **Facilitating Goods:** Tangible elements that are used or consumed by the customer, or the service provider, along with the service provided.
  - Banking Industry Examples: cash and coins, deposit forms, statements
- **Explicit Services:** includes the availability and access to the service, consistency of service performance, comprehensiveness of the service, and training of service personnel.
  - Banking Industry Examples: check cashing, safe deposit boxes, loans
- **Implicit Services:** includes the attitude of the servers, atmosphere, waiting time, and convenience.
  - Banking Industry Examples: security, privacy

## Service Location Strategy and Layout Strategy

### Location Strategy

There is an old adage in real estate: "location, location, location." In the context of the service industry it means that the business might thrive or fail based on the location. Many services, as described in this chapter, are heavily dependent on proximity to customers and are therefore highly susceptible to location issues. The "right" location can make or break a service business. An example of a company that has done a good job of this is McDonald's. They spend a great deal of time and money to research the right location for a new franchise to ensure success. Aspects considered include population, demographics, income levels, vehicle traffic, pedestrian traffic, number and type of competitors in the area, and proximity of competitors. Service providers should make it easy for customers to find the facility.

When considering a location it may be important to know what support services are in the immediate area such as fire, police, and medical facilities, as well as support services from the local city operations departments.

### Layout Strategies

Once customers arrive, service providers should also make it easy for customers to find what they are looking for, or to find what the service provider wants them to find. The layout of the facility should be designed to reduce the distance traveled by the customer within the facility.

For example, a doctor's office waiting room usually has a receptionist where patients (i.e., customers) check in when they arrive, and generally, immediately adjacent to the waiting room are the examining rooms. The doctor's office wants the patients to arrive, check in with the receptionist, sit in the waiting room, and then wait to be called to go into the examining room where they can be examined. Once the meeting with the doctor is concluded, the process is reversed to exit.

Another example is a service center such as a car dealership, a pet grooming facility, or a car wash. The customer can enter, check in, and then watch the service personnel working on their possession while sitting in the waiting room waiting for the service to be completed. This is also a way to occupy the customer's time while waiting. It's provides something to do that interests the customer and distracts them from consciously being aware of how long it might be taking to complete the service.

### *Transportation and Warehousing in Services*

Services may require the use of facilitating goods which are tangible elements that are used or consumed by the customer, or the service provider, along with the service provided (computers, furniture, office supplies, medical supplies, repair parts, equipment, etc.).

- These facilitating goods need to be transported and warehoused in order to provide the service activity.
- Generally these transportation and warehousing activities occur behind the scenes (i.e., out of view of the service customer).
- Customers may have no idea how these facilitating goods actually get to the destination but they are likely to notice if they are not available as expected.

## SERVICE RESPONSE LOGISTICS

A primary concern of service response logistics is the management and coordination of the organization's service activities.

The four primary activities of service response logistics are:

- Managing service capacity
- Managing waiting times
- Distribution channels
- Service quality

## *Managing Service Capacity*

### Service Capacity

Service capacity can be expressed as the number of customers per day, per shift, per hour, per month, or per year that the company's service system is designed to serve. Regardless of the specific breakdown, it's the number of customers that the service provider can service at any one time. It is the planned capacity for the service environment.

Not Enough Capacity:

If the **demand exceeds capacity**, and the service provider does not currently have the capacity to serve all of the customers, there are three basic alternatives:

1. Turn customers away and not service them
2. Make customers wait until service is available for them
3. Increase service capacity (i.e., the number of service personnel and the associated infrastructure to provide the service)

Since most services are accomplished by service personnel, the service provider will likely need to hire more people to respond to the increased demand. Hiring, training, supervising, and equipping personnel is costly and can account for approximately 75% of the service provider's operating costs. This situation makes forecasting service demand critically important, particularly because services cannot be inventoried or carried out in advance.

To minimize the cost of hiring and laying off employees, the following strategies may help handle periods of **high demand:**

- Sharing employees who have been cross-trained so that they can help on the task that is busy at the moment
- Using part-time employees (e.g., during the holiday season)
- Using customers—"hidden employees" (e.g., self check out)
- Using technology (e.g., scanning documents in the insurance industry for use in multiple departments as necessary)
- Using employee scheduling policies (e.g., nurses have to work alternating holidays)

Too Much Capacity:

If the **capacity exceeds demand**, and the service provider does not have enough work, instead of disposing of excess capacity (e.g., laying off personnel), find other uses for the available capacity:

- Do other jobs when it's not busy. Example: in a restaurant you might have workers clean the bathrooms, prep for the dinner rush, and other various tasks.
- Do training or cross training.
- Use demand management techniques to shift demand from peak demand periods into non-peak periods by offing incentives like discounts and special sales (e.g., early bird specials, 20% off from 9 am to noon).

### Service Capacity Planning Challenges

Service providers are 100% reliant on the customer to create the flow of demand, which has a direct impact on their ability to fully utilize capacity. Some of the challenges are:

- Customer arrivals fluctuate, and service demands can also vary by customer.
- Idle capacity is a reality for services for which service providers must plan.
- Customers are participants in the service, and the level of congestion can impact on perceived quality.

### Service Capacity Decisions

- **Long-Range:** Capacity can be used as a preemptive strike where the market is too small for two competitors to coexist. Example: the first to build a luxury hotel in a midsized city may capture all the business.
  - A strategy of building ahead of the demand is often taken to avoid losing customers.
- **Short-Range:** The lack of short-term capacity can generate customers for the competition. Example: If restaurant staffing is inadequate to handle the volume of customers arriving at the restaurant, the customer will likely go elsewhere.
- **Balance:** Capacity decisions must be balanced against the costs of lost sales if capacity is inadequate, or against operating losses if demand does not reach expectations.

## Service Capacity Utilization

Service capacity utilization is calculated as the number of actual customers served per time period, divided by the available capacity.

**Examples:**

1. A hotel has 80 rooms booked out of a total of 100 rooms available. Utilization = 80%
   - This is pretty straightforward in that there are a fixed number of rooms and they are either booked or not booked. (80 / 100 = 0.8 or 80% utilization)
2. On average, a doctor can see X patients per hour. But, if the doctor takes longer with each patient than the average, the patient wait time starts to get backed up and some patients wait longer.
   - The doctor's office is not going to call in a temporary doctor for the rest of the day to catch up.

## Demand Strategy

Similar to planning for manufacturing supply, planning for service capacity follows the level demand strategy, or the chase demand strategy.

Level Demand Strategy

Service capacity is set to remain constant regardless of demand. When demand exceeds capacity, queue management tactics are used to handle the excess customers.

Examples:

- The use of one queueing line (instead of many lines) at a bank or at a McDonald's to provide first-come-first-serve priority.
- The use of numbers at the deli. Note: This technique does not work well in all settings, such as a hospital emergency room.

## Chase Demand Strategy

Service capacity is set to vary along with demand. The company hires and lays off workers to match the fluctuating demand. The company must take appropriate actions in advance to have available options for this strategy to work.

Examples:

- Grocery store opening up additional checkout line(s) with additional cashiers as volume in the checkout queue starts to grow.
- Restaurant calls in additional off-shift wait staff to meet increased demand following a local sporting event.

## *Managing Waiting Time*

Managing waiting time involves managing both the actual waiting time and the perceived waiting time. The perceived waiting time by the customer is just as important as the actual waiting time, and may even be more impactful. In order to develop an effective waiting time management strategy, some basic information needs to be determined.

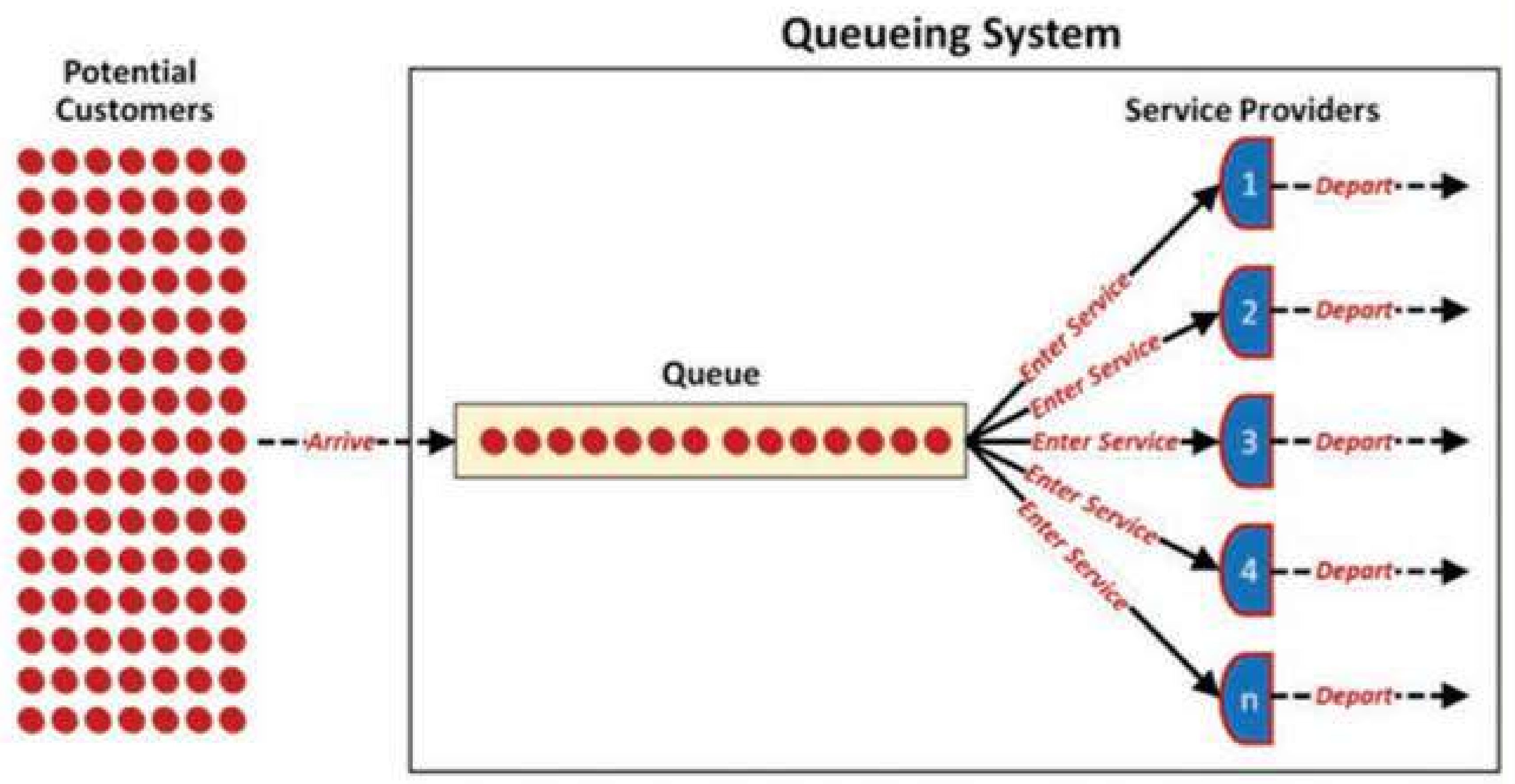
- "What is the average arrival rate of the customers?"[2]
- "In what order will customers be served?"[2]
- "What is the average service rate of the providers?"[2]
- "How are customer arrival and service times distributed?"[2]
- "How long will customers wait before they either leave or lower their perceptions of service quality?"[2]
- "How can customers wait even longer without lowering their perceptions of service quality?"[2]

Having this information will allow the service provider to develop a waiting time strategy specific for their business and location that will minimize the impact to the customers and on the business in general.

### Queuing Systems

A queue management system is used to help control the flow and prioritization of people expecting to receive a service. Often referred to as "crowd control," queues can be utilized for almost any situation where large numbers of people are gathering, or waiting in line to purchase tickets, enter a facility, etc. Queues are common in airports, amusement parks, and retail stores.

FIGURE 12.3




(McLaury, 2016)

## Queue Types:

- **Structured queues:** See figure 12.3. These queues are set in a fixed position such as a supermarket checkout line, airport, or bank. Queue management systems can be structure with or without customers being assigned a number and waiting for that number to be called after all previous numbers have been served in order of assignment (i.e., "take-a-number"). This option will allow customers to temporarily leave the queue and walk around while waiting for their number to be called.

- **Unstructured queues:** When people form queues somewhat informally in various directions and locations. These types of queues are seen in retail stores, at an airport waiting for a taxi, and people waiting for an ATM machine, for example.

- **Mobile queues:** Queues formed virtually with technology. Customers can use technology such as a smartphone to place their name in a real-time electronic queue such as at a restaurant. This type of queuing has provided a great deal of flexibility.

## Queuing System Input:

- Customers are the demand source for services, and their arrival triggers the start of the service experience.

- Customers generally appear in predictable arrival patterns (e.g., the dinner rush at a restaurant).

- There are mathematical models available to help predict customer arrivals for planning purposes, such as the Poisson distribution model.

### Queuing System Assumptions:

- Most queuing models assume that customers enter the queue, and stay in the queue until served.
  - **Balking** is when customers refuse to join the queue. They arrive and determine that the queue is too long and decide to go elsewhere or return later.
  - **Reneging** is when customers decide to leave the queue. They are already in the queue and then decide that it is taking too long, or they change their mind about the service, and decide to leave the queue.
- Queuing models, for the purposes of calculations, assume an infinite length of a queue.

### Queue System Design:

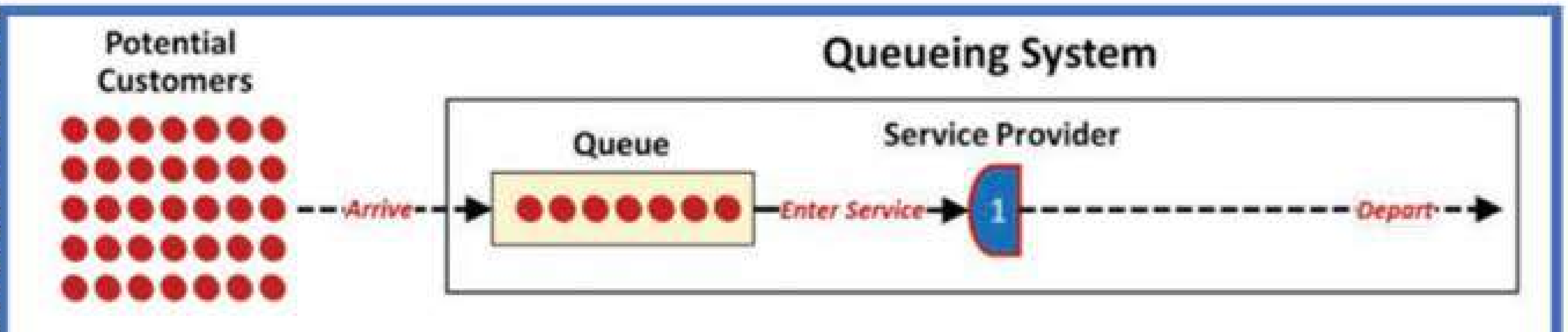
- Queue discipline describes the order in which customers are served. Examples: first-come-first-served, greatest need such as in a hospital emergency room.
- Queuing configurations can be comprised of single or multiple queueing lines.
- Queue lines can be serviced by either a single server or multiple servers.
- Multiple servers can also act in series or in parallel.

Choosing the correct design and queueing layout is a matter of individual service provider or organization design. Depending on the nature of the service and the desired flow of people, an organization will create and change the flow as needed.

The following gives a brief idea of several types of layouts:

- Single channel, single phase, single server (figure 12.4)

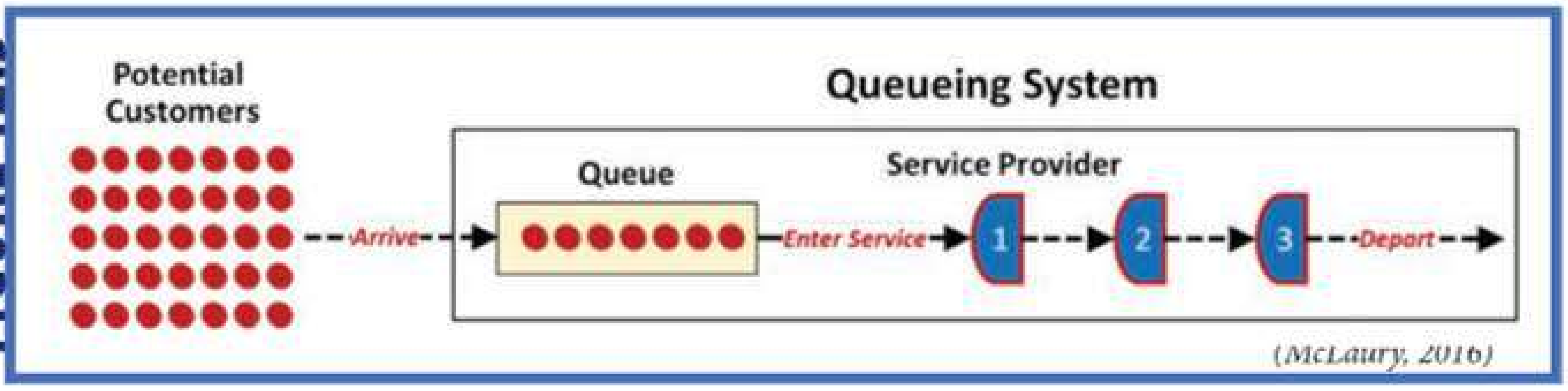
FIGURE 12.4




(McLaury, 2016)

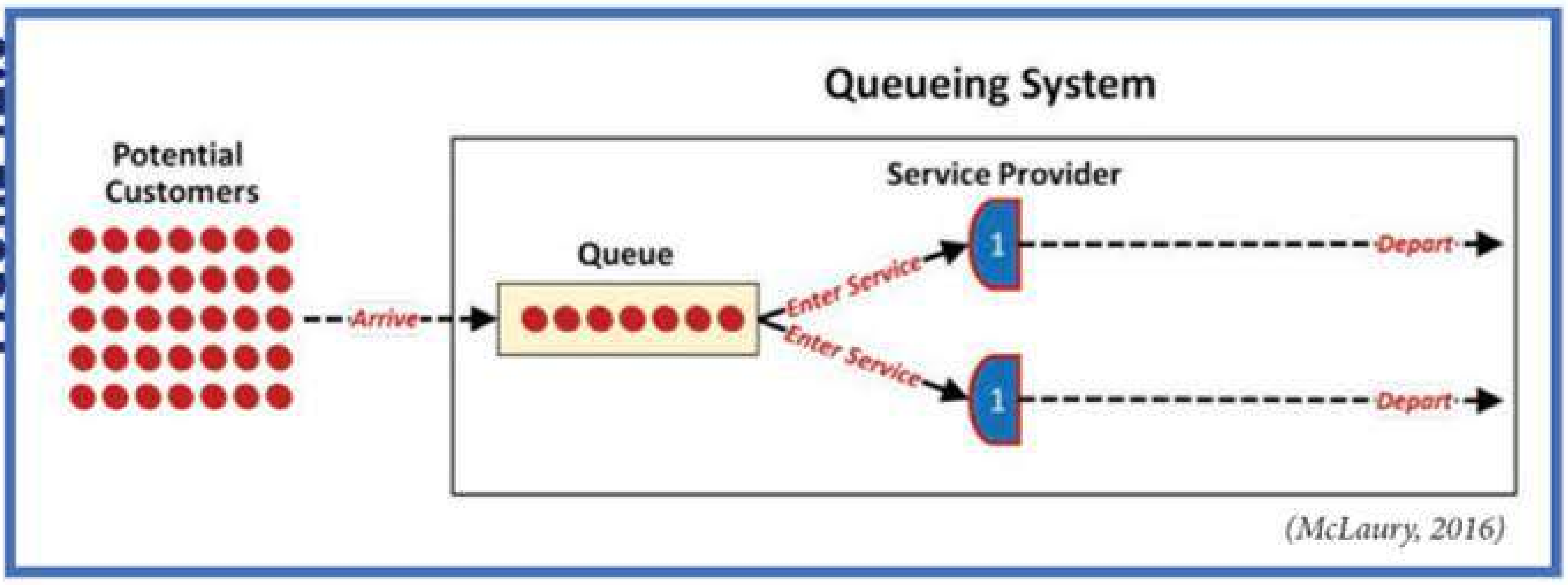
- Single channel, multiple phase, acting in series (figure 12.5)

FIGURE 12.5



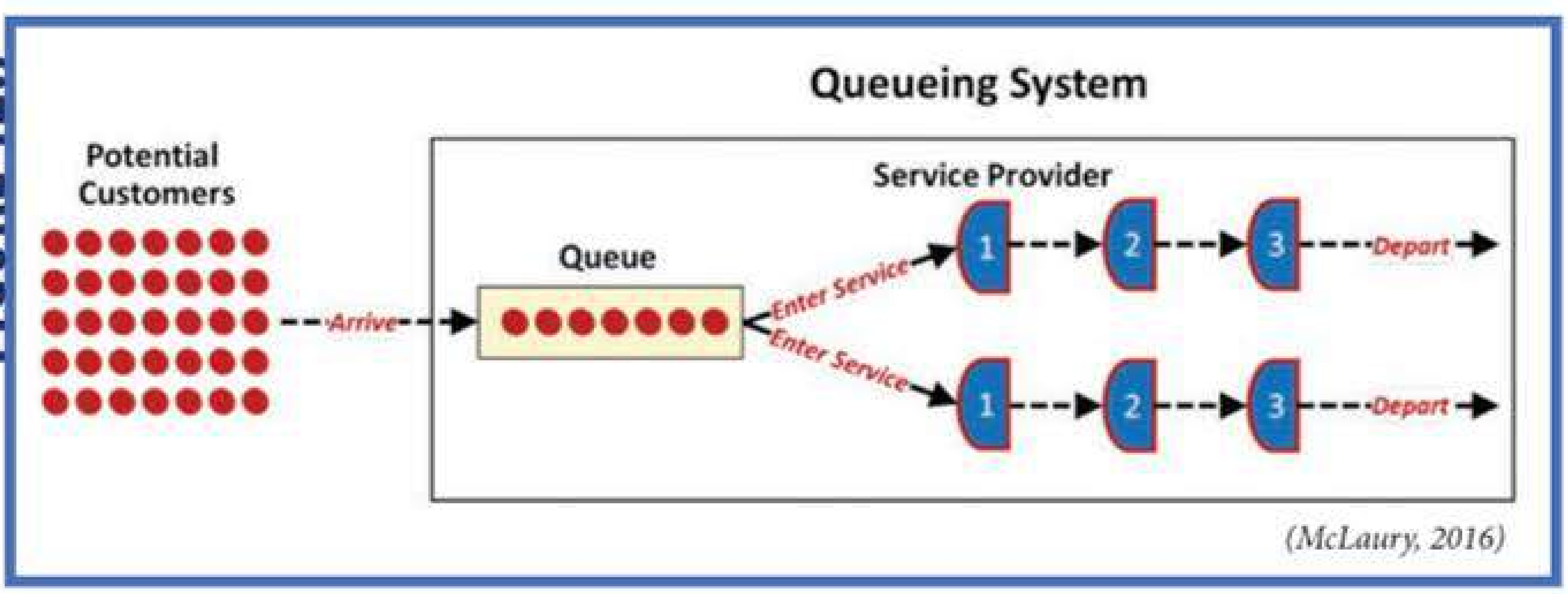

- Multiple channel, single phase (figure 12.6)

FIGURE 12.6




- Multiple channel, multiple phase, acting in parallel (figure 12.7)

FIGURE 12.7



### Managing Perceived Waiting Times

Waiting time has a huge impact on customer satisfaction, whether that is the actual time that customers must wait for the service to be delivered, or what customers perceive as the time that they are waiting for the service to be delivered. This issue leads directly to the first and second rules of service:

1. Customer satisfaction is achieved when the customer's perception of the service is at least equal to if not better than the customer's expectation.

2. It is hard to play catchup. A company may only get one chance to get it right in the eyes of the customer before losing that customer permanently, and also risk receiving a bad public review.

### Waiting Time Management Techniques

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No one likes to wait in line; however, it is a reality, and even a necessary evil, for many service offerings.

There are mathematical formulas (which we will not explore in this text) used to help predict wait times. These formulas are based on certain predetermined assumptions and probabilities. There are also techniques for reducing the actual time spent waiting and/or the perception of the time spent waiting for the service to be delivered. Disney and other theme parks, for example, use these techniques. The answer is to keep the customers' minds off of waiting.

The following are some of the more common waiting time management techniques in use:

- **Keep customers occupied** during the wait time, and distracted from watching the time pass. Consider adding some form of entertainment to the waiting process to keep peoples' minds off of the wait. Examples: video programs, reading materials, games and activities, information boards with facts and history, viewing windows/areas to see the service they are waiting on, related exhibits[2]

- **Start the service quickly**. Don't make the customer wait again. Example: Once seated in the restaurant, <u>don't</u> make customers wait again before seeing the wait staff, receiving the menu, and starting the ordering process.[2]

- **Relieve customer anxiety**. Communicate. Let them know that there is no issue, everything is normal. The service will start soon or is progressing as expected.[2]

- **Keep customers informed.** Examples: "The wait time from this point is…," "The ride is stopped but will resume in 6 minutes."[2]

- **Group customers together in the queue**. Customers will often talk with one another, which occupies them and distracts them from watching the time.[2]

- **Design a fair waiting system.** Examples: first-come-first-serve, single file / single queue, take-a-ticket numbers, pre-arranged reservation or appointment[2]

## DISTRIBUTION CHANNELS

There are a variety of traditional and contemporary ways that services can be delivered. Some of the more common ways are through:

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- Facilities
- Retail stores
- Mail order
- Telephone
- Door to door
- Television
- Seminars and classrooms
- Automated equipment (ATM, kiosk, etc.)
- Mobile units

The following are some relatively new and unique ways that services are being distributed:

- **"Eatertainment"**[2] is a combination of food (restaurant service) and entertainment—that is, dinner and a show. Examples: Medieval Times, Rainforest Café, Dave & Buster's

- **"Entertailing"**[2] is a combination of the retail business with entertainment elements. Examples: shopping mall with children's play area, rides, fashion show

- **"Edutainment"**[2] is a combination of learning activities to go along with entertainment elements. Examples: Epcot Center, Liberty Science Center

- **Internet,** as a distribution channel for services, offers convenient and immediate access to information in real time. Customers, whether individuals or businesses, can use the tools on the internet to search for information, find suppliers, make appointments, do comparison shopping, buy things, sell things, provide feedback or reviews, and much more. Waiting times can be virtually eliminated. There are companies that offer products and services exclusively via the internet. This is referred to as a **pure strategy**.[2] Other companies offer products and services both in a physical store or facility location and via the internet. This is referred to as a **mixed strategy**.[2]


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## SERVICE QUALITY

Identifying the quality of services is more difficult than identifying the quality of a physical product. This is largely because perceptions and expectations are subjective. What one customer versus another customer might think is good quality service, might be significantly different for the exact same service. This has much to do with expectations. To have excellent customer service all the time, the service provider needs to consistently exceed the customer's expectations, which may mean helping to form the customers' expectations. One example of forming the customers' expectations are the greeters at Walt Disney World. When new arrivals come onto the park, the greeters' job is to "make them happy" and they are trained to do just that. Another example is a service provider promising to deliver a service in 4 hours knowing that he or she can actually complete the service in 3.5 hours.

Service quality also depends significantly on the service provider's employees due to the ratio of labor to materials in service products and the expertise and professionalism of those individuals providing the service. Even an exceptional service provider can have a bad day.

In their research, Parasuraman, Zeithaml, and Berry[3] identified five dimensions typically used by customers to rate service quality.

1. **Reliability:** Consistently performing the service correctly and dependably. This dimension was consistently identified by customers as the most important of the five dimensions.

2. **Responsiveness:** Providing prompt and timely service.

3. **Assurance:** The ability to convey trust and confidence to customers.

4. **Empathy:** Providing caring attention to customers.

5. **Tangibles:** The physical characteristics of the service, including facilities, servers, equipment, and associated goods

There is no excuse for poor service. It does happen for any number of reasons, and when it does, the immediate issue is to recover from the situation such that it will not leave a lasting impression in the mind of the person who just faced what he or she considers to be bad service. People who have received great service on average are likely to tell at least five other people, whereas people who feel that they received what they consider to be bad service are likely to tell ten times that many.

To recover from poor service quality consider the following:

- Develop recovery procedures that are thought out prior to the bad event happening.
- Train employees in these procedures prior to the event, and practice them.
- Empower employees to remedy customer problems, and recognize them publicly when they do, to encourage others to do the same.

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# ENABLE

# Chapter 13

## Project Management

### CHAPTER OUTLINE

# INTRODUCTION

Project management processes, guidelines, and leadership techniques are becoming a predominant factor in the way organizations are conducting business and coordinating supply chain management resources to achieve desired and agreed upon results. All projects (and organizations), large or small, to some degree can utilize the processes project management offers. The question whether projects will be managed reactively or proactively is dependent upon the culture of an organization, its belief and support of supply chain management, project management, and the quality of management and leadership skills provided by the project manager. This being said, it is critical that a practical set of project management guidelines is agreed upon and adapted as a way of conducting project business. To better understand project management, consider the following questions:

- Projects encounter unexpected problems and issues throughout their lifecycle. Are those problems and issues resolved proactively using previously agreed upon guidelines, or is there hesitation when problems arise—questioning who to communicate with, who has the ownership and authority to resolve them?

- Projects can affect a large number of people and are cross-functional throughout the supply chain. This type of structure creates an uncertainty of risk causing planned tasks or activities not to happen as planned, and delivers less than agreed upon results, late schedules, and budgets over estimates. Are risks proactively managed, controlled with resolution before their occurrence, or after they occur with consequences resulting in changes to time, cost, resource reallocation, and cause and effects to other projects?

- Projects have stakeholders each of whom has specific benefits they want satisfied at the project's completion. Will the project scope (tasks and activities) be discussed and managed through an agreed upon change management process proactively with measurability and verifiability, or will there be a void in the process before reality dictates the project is over budget, off schedule, and will not deliver agreed upon results?

History tells us a great percentage of projects, especially large ones, do not end successfully. It has also been said by some organizations that they would be happy just to have their projects finish with some degree of success. This last statement is not true, because today's organizations expect projects to be completed faster, cheaper, and with the highest level of quality possible. The most successful way to meet project objectives is utilization of practical and effective project processes and guidelines led by a qualified manager with strong people skills and an involved and committed project team. Considering size, complexity, and other characteristics of project complexities, successful projects can only come from the utilization of guidelines to conduct business throughout the supply chain and education of the project team to those guidelines. Asking the team for involvement and commitment of tasks supported by measurability and verifiability is a winning combination for project success.

There is an old saying applicable to project management: "Plan the work and work the plan." Clearly, this is the key to successful project management. You must first plan the project, then monitor and control the execution of defined tasks and activities. The following is an overview of the project process to support successful results.

# PROJECT PLANNING

A fear striking the hearts of many supply chain project managers and team members is the perceived inaccuracies of stated project objectives, time frames, and costs as handed down from on high. To eliminate this fear, the following two points of reference are being made: (1) In most cases persons initiating the project are using past experiences, knowledge, and current issues being faced to generate said information; and (2) project managers and teams who do not complete a Phase One "Concept and Feasibility" to accurately determine both best and worst case scenarios are not fulfilling a professional responsibility to the project owners. By providing proper business information to the project conceptors, they are then in a position to make informed business decisions. It cannot be overstated how important proper planning of a project is. The two most significant factors causing project failure are "poorly defined objectives and a lack of communication," which point to something lacking in the planning process.

There are three major deliverables from the project planning process: (1) a project objective definition or statement, (2) the work plan consisting of tasks and activities, and (3) the project management procedures or guidelines to conduct supply chain project business.

## *Project Definition*

### Plan the Work by First Utilizing a Requirements Document

Two tendencies that often occur during the planning portion of projects are to (1) shortcut the initial planning process by jumping into the performance of project work immediately upon receipt of the project, and (2) spend too much time planning excess detail for the project's lifecycle. These can be major mistakes. First, not to plan is a self-explanatory error on everyone's part and requires no further discussion. Second, to plan excessive detail for a period of time far down the line requires something greater than a crystal ball, because no one can predict the future. As an example, something heavily detailed today, called task B, but scheduled to happen several months from now could, and often does, become adversely affected by changes from other activities. These changes will ultimately cause a redesign of task B and all tasks linked thereafter. Even though a significant amount of project planning must take place up front, it should first be completed at the summary level with a detail level extended only out to a logical time frame such as 30, 60, or 90 days ahead. This provides a rolling wave effect of adding a new week as the current week is completed, allowing for detailed planning but with less chance of change.

As a project progresses, changes occur. As each change occurs the plan from that date forward will also change, thus the need for an ongoing project planning process. Time spent properly planning a project results in reduced cost, and duration of time, better utilization of resources, and increased quality over the life of the project. The project definition is the primary deliverable (agreed upon result) and is generated from the project's planning process. The project plan describes all aspects of project work starting at a high (summary) level including appropriate phases and guidelines on how to conduct project business. Once approved by the customer, relevant stakeholders and management, it becomes the basis for project work (tasks and activities) to be performed and the processes by which to conduct project business. The project definition and requirement document should include the following:

- **Project Overview:** Describes the background context for the project and why it is being undertaken; it speaks to the business value of the work being performed.
- **Objective Statement:** Provides a summary of the project. This contains a high-level explanation of the project deliverables, scope, timeline, approach, and organization.
- **Scope:** Clearly defines the logical parameters of the project. This is the area to define what is to be included (in scope) and what is to be excluded (out of scope). Lack of clarity here is what often leads to "scope creep," excessive changes and dissatisfied customers.
- **Deliverables Produced:** It is important to describe agreed upon deliverables of the project. Provide enough explanation and detail (measurability and verifiability) allowing the reader to understand what has been agreed upon and understood as the final product.
- **Assumptions and Risks:** What events are being taking for granted (assumptions), and what risks are circumstances or events exist outside the control of the project team?
- **Approach:** How will the project conduct business? Describe the use of business processes (project management guidelines) to be utilized.
- **Organization:** Show the significant roles (and responsibilities) of the project team. Identifying the project manager is easy, but who is the sponsor? Who is on the project team? Are

any of the stakeholders represented? Completion of a RACI chart provides a strong picture of responsibility, accountability, consultative support, and information flow. Use of a RACI chart helps provide a picture of who has what level of authority.

- **Initial Effort, Cost, and Duration Estimates:** These estimates must start as best effort estimates to reflect actual performance time (duration estimates are the start-to-finish calendar dates to complete effort estimates) multiplied by the cost per hour of doing business per functional area, then revised as required when changes take place throughout the project lifecycle.

- **Signature Page:** Ask for sponsor and stakeholders' approval. Their signature signifies they agree to the plan.

## *Project Work Plan*

After the initial project definition has been prepared, the work plan (also called the "scope of work") can be defined. The work plan is derived by conducting a work breakdown structure (WBS) process and provides a step-by-step outlined list of activities (tasks) for completing project deliverables. The results of the WBS task list provides a vehicle for managing and tracking progress—providing that measurability and verifiability have been accurately identified to appropriate tasks. When available, use a prior work plan from a similar project as a template. Use of a task planning worksheet expedites development of a logic diagram by defining predecessors and successors for each task.

### Create a Planning Horizon

In addition to summary level tasks, create a detailed work plan, including assigning resources (identifying skill requirements) with effort estimates for each task as far ahead as you feel comfortable. Because objectives and tasks change throughout the life of a project, utilize the 30-, 60-, or 90-day outlook mentioned earlier. This allows for better ongoing planning without mass destruction to time schedules and planned resources. This becomes your planning horizon.

## *Project Management Procedures*

### Define Project Management Procedures (Upfront Guidelines)

The project management procedures (guidelines) include sections on how the team will manage issues, scope, change, risk, quality, communication, and so on. It will also include resource utilization and effort and elapsed time estimating. It is important to be able to manage the project proactively, ensuring the project team and all stakeholders have a common understanding of how to conduct business within the project environment. If procedures (guidelines) have previously been established by an organization (corporate culture), then utilize them; however, carefully review them for each project to ensure they are current and accurate for that environment.

## MANAGE AND CONTROL

Once the project has been accurately planned at the high (summary) level, execution of the tasks can begin. In theory, since you have agreement (requirements document with inclusions and exclusions) on the project definition (agreed upon results) and a work plan and project management procedures (guidelines) are in place, the next challenge is to execute your plans and processes correctly. Most projects do not proceed exactly as estimated and planned. Herein lies the prime reason for task measurability and verifiability and it is the responsibility of the project manager to exercise leadership skills to proactively track project tasks. The project manager must exercise course correction, when and if required, utilizing change management procedures stipulated in the project guidelines to get the project back on track or in line with newly agreed upon deliverables.

### *Manage the Work Plan*

Regularly reviewing the work plan determines progress in terms of schedule and budget. If the project is small (short in terms of duration), weekly tracking of the schedule and daily monitoring of work tasks (measurability and verifiability are essential here) are sufficient. Larger projects may require a more rigorous effort of daily monitoring of tasks and schedules. Using a scheduling program such as Microsoft Project helps with schedule tracking.

- Monitor the schedule. Identify activities that have been completed during the previous time period and update the work plan to show they are finished. Determine whether there are any other activities that should be completed but have not been. After the work plan has been updated, determine if the project will be completed within original estimated effort, cost, and duration. If not, determine the critical path and look for ways to expedite these activities to get back on track.

- Monitor the budget. In today's business environment, cash flow is critical; therefore, monitoring the budget for cash flow is of prime concern. Look at the original budget against current spending; identify variances and determine whether spending is more than or less than originally estimated. This information must be based on the work completed to date and if there is a deviation from budget plan always identify the exact variance and reason for that variance documenting it by specific tasks.

Look for Project Trouble Signs:

- A small variance exists in the schedule or the budget is beginning to increase, especially early in the project.
- Tasks that are considered complete are still being performed.
- There is a need to rely on unscheduled overtime to meet deadlines.
- Team morale is fading fast.
- The quality of service and/or process is starting to deteriorate.
- Quality-control steps and project management time begin to be cut back.

## Manage Scope and Change

Along with managing a schedule, managing scope is critical to control a project. Projects often fail not through problems with estimating or resource skills but with team members working on deliverables not part of the original project definition or agreed upon result. Even with good change management procedures in place, two major areas of change management must be understood and in place for a project to be successful. They are understanding who the customer is and the fact there will be scope creep.

## Ensure the Sponsor Approves Change Requests

The project sponsor is the person funding the project (internal or external to the organization). Although there is usually only one sponsor, a project could (and almost often does) have many stakeholders or people who are impacted by the project. Requests for scope change often come from stakeholders, many of whom may be managers of functional support units. It doesn't matter how important a change is to a stakeholder, they cannot make scope-change decisions alone, and cannot give a team approval to make a change. In proper scope-change management, the sponsor (or their designate) must give the approval and accept the impact of changes, as they are the only ones who can authorize additional funding to cover cost, schedule, resource relocation, and domino effect to other projects.

## Guard Against Scope Creep

Projects must utilize an agreed upon change management procedure as defined in the project management guidelines; however, sometimes small scope changes are not recognized and these add up over time. Scope creep is a term defining a series of small changes made to a project without change management procedures being utilized. Projects can easily fail because of scope creep; therefore, the project manager and team need to be ever alert for scope creep and guard against them.

## MANAGE RISK

Risks refer to potential events, issues, or circumstances outside the project team's control, which usually have an adverse impact on project tasks and overall agreed upon results (deliverables and objective).

### *Identify Risks Up Front*

During project planning the project team should identify any and all known risks (utilizing a database of past project variances and their reasons is invaluable). For each risk, determine the probability of occurrence (identify reasons as well as percentage), the impact it will have on the project, and what the impact will affect (i.e., cost, time, quality, and agreed upon results). Then place them in a priority order. Events and issues with high risk should have specific plans put in place at once to ensure nonoccurrence. Medium risks must also be evaluated to help proactively manage them. Low-level risks must also be identified as assumptions, because these can always turn into higher level risks at a later date. Once a project begins, periodically perform a risk assessment to determine if other risks may surface within the next window of time being tracked. Refer to figure 13.1.

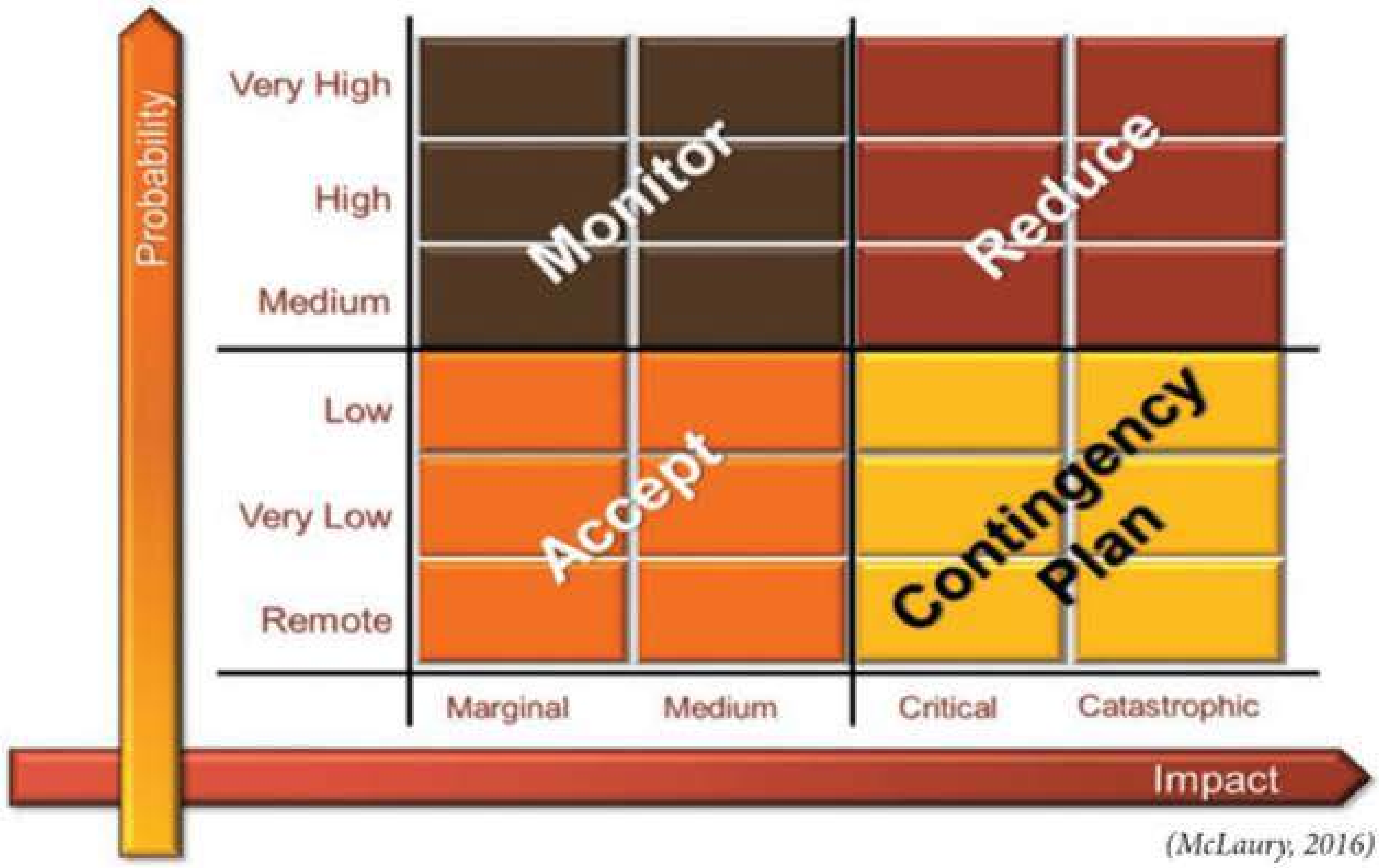
## MANAGE ISSUES

All projects will have issues arise that must be dealt with even when strong risk management procedures are in place. The opportunity for risk occurrence is far greater if project tasks are not monitored regularly (through measurability and verifiability) and a change and risk management process is not in place and agreed upon as part of the project management guidelines.

### *Resolve Issues as Quickly as Possible*

The project manager must manage open issues (problems) promptly and thoroughly, ensuring their resolution. If there is no urgency to resolve an issue then it may not really be an issue. It may be a potential problem (risk), or it may be an action item that needs resolution at a later point in time.

FIGURE 13.1




*(McLaury, 2016)*

## CONCLUSIONS

Projects can be lengthy and costly to an organization. There are always complexities dealing with new technology, systems, processes, and products. There are also challenges to implementing a project with as little adverse impact on the customer as possible. All these challenges can be met and overcome through a well-defined process of planning, monitoring, controlling, and executing. The planning, monitoring, and controlling aspects are where project management guidelines, processes, and techniques are important. Resist the urge to jump right into the project execution. Proper planning and management of the project will take more time up front but will be rewarded with efficiencies and savings throughout the life of the project. Remember project management best practices include:

- Plan the work by utilizing a project definition (requirements) document.
- Create a planning horizon.
- Define project management (guidelines) procedures up front.

- Look for warning signs.
- Ensure the sponsor approves scope-change requests.
- Guard against scope creep.
- Identify risks up front.
- Continue to assess potential risks throughout the project.
- Resolve issues as quickly as possible.

## PROJECT MANAGEMENT DEFINITIONS

<table>
<tr><td>Portfolio: Projects, programs, and operations managed as a group to achieve strategic objectives</td><td rowspan="3">
</td></tr>
<tr><td>Program: A group of projects and activities managed in a coordinated way</td></tr>
<tr><td>Project: A temporary endeavor undertaken to create a unique product, service, or result</td></tr>
<tr><td colspan="2">Project Management: The application of knowledge, skills, tools, and techniques to project activities to meet project requirements</td></tr>
<tr><td colspan="2">Project Manager: The person authorized by the organization to direct the team accountable for realizing the project objectives</td></tr>
<tr><td colspan="2">Project Stakeholders: Includes all project team members, and anyone impacted by, or anyone impacting, the project</td></tr>
<tr><td>Triple Constraint: the foundation of project management is balancing the triple constraint of scope, time, and cost, with quality at the center</td><td>
</td></tr>
</table>



(McLaury, 2016)

## PROJECT MANAGEMENT TOOLS AND TEMPLATES

As described earlier in this chapter, project management is a process that is best achieved when managed in a systematic way. The following pages describe a basic process, and tools which may be used to help manage the project management process as described earlier.

**First a decision to have a project.** The decision to have a project is often determined by management usually at a senior level, and often presented in a verbal format. It is best when a project request is made that it be supported by a preliminary requirements document (e.g., SCM PM 01A). This document provides a baseline for the PM to communicate with those supply chain functional managers who will participate in confirming the accuracy of the project's objective, high-level timeline, and budget.

## The Preliminary Project Requirements Document

| The ABC Corporation - - - - Supply Chain Management | |
|---|---|
| **Project Title:** | |
| **Preliminary Project Requirements Document** | **Date:** |

| **General Information** | | | |
|---|---|---|---|
| **Company:** | | Location: | |
| **Contact Person:** | | Date: | |
| **Phone No.:** | | Email: | |

| **Preliminary Project Overview Statement (Project Specifics and Focus Statement)** |
|---|
| Provide as specifically as possible an overview statement of the projects objective(s) and agreed results. |

| **Project Assumptions:** |
|---|
| What high-level assumptions have already been made about the project? |

| **Approval and Authority to Proceed to a Requirements Document Using Project Process Approach** | | |
|---|---|---|
| We approve the project as described above, and authorize the team to proceed. | | |
| **Name** | **Title** | **Date** |
| | | |
| | | |
| | | |

| **Item** | **Add Attachments As Needed** |
|---|---|
| **1** | |
| **2** | |

SCM PM 01A

## The Project Requirements Document

The project requirements document contains greater detail as defined by the project manager and team of supply chain functional members. This document is presented to the stakeholder for approval (prior to the actual start of a project) but is often rejected for modification prior to its final signed approval.

| The ABC Corporation - - - Supply Chain Management | |
|---|---|
| **Project Title:** | |
| **Project Requirements Document** | **Date:** |

| General Information | | | |
|---|---|---|---|
| **Created by:** | | Date: | |
| **Phone No.:** | | Email: | |

| Project Overview Statement (Project Title and Focus Statement) |
|---|
| Answer the question, Why is it important to achieve the project objective? What do you hope to achieve by executing this project? |

| Project Scope (List Inclusions) |
|---|
| |

| Project Scope (List Exclusions) |
|---|
| |

| Project Agreed Results (Expressed with Measurability and Verifiability) |
|---|
| What will the project actually produce? |

| Project Assumptions: |
|---|
| What high-level assumptions have already been mad about the project? |

| Project Approach (Project Management Guidelines, PMG)<br>Include: communication, risk management, and reporting plans. |
|---|
| |

| List the Project Stakeholders | | | |
|---|---|---|---|
| **Name** | **Title** | **Name** | **Title** |
| | | | |
| | | | |

| Approval(s) and Authority to Proceed | | |
|---|---|---|
| We approve the project as described above, and authorize the team to proceed. | | |
| **Name** | **Title** | **Date** |
| | | |

| Item | Attachments |
|---|---|
| 1 | |

SCM – PM 01

## The Project Phase Approach

To better manage a project, divide it into several phases providing better management control and appropriate ways to measure and verify accuracy of the project performance and progress.

| The ABC Corporation - - - - Supply Chain Management | | | | |
|---|---|---|---|---|
| Project Title: | | | Chart Project Phase | |
| Phase Number One:<br>Title: | Phase Number Two:<br>Title: | Phase Number Three:<br>Title: | Phase Number Four:<br>Title: | Phase Number Five:<br>Title: |
| Phase Statement: | Phase Statement: | Phase Statement: | Phase Statement: | Phase Statement: |
| Summary Level Task List | Summary Level Task List | Summary Level Task List | Summary Level Task List | Summary Level Task List |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Phase agreed results are: | Phase agreed results are: | Phase agreed results are: | Phase agreed results are: | Phase agreed results are: |
| | | | | |
| Buy off this phase:<br>Yes No<br>Buy in to next phase:<br>Yes No | Buy off this phase:<br>Yes No<br>Buy in to next phase:<br>Yes No | Buy off this phase:<br>Yes No<br>Buy in to next phase:<br>Yes No | Buy off this phase:<br>Yes No<br>Buy in to next phase:<br>Yes No | Buy off this phase:<br>Yes No<br>Buy in to next phase:<br>Yes No |

| Senior Phase Review Committee | | | |
|---|---|---|---|
| Signatures | | | |
| | | | |
| Title: | Date: | Title: | Date |
| | | | |
| Title: | Date: | Title: | Date: |

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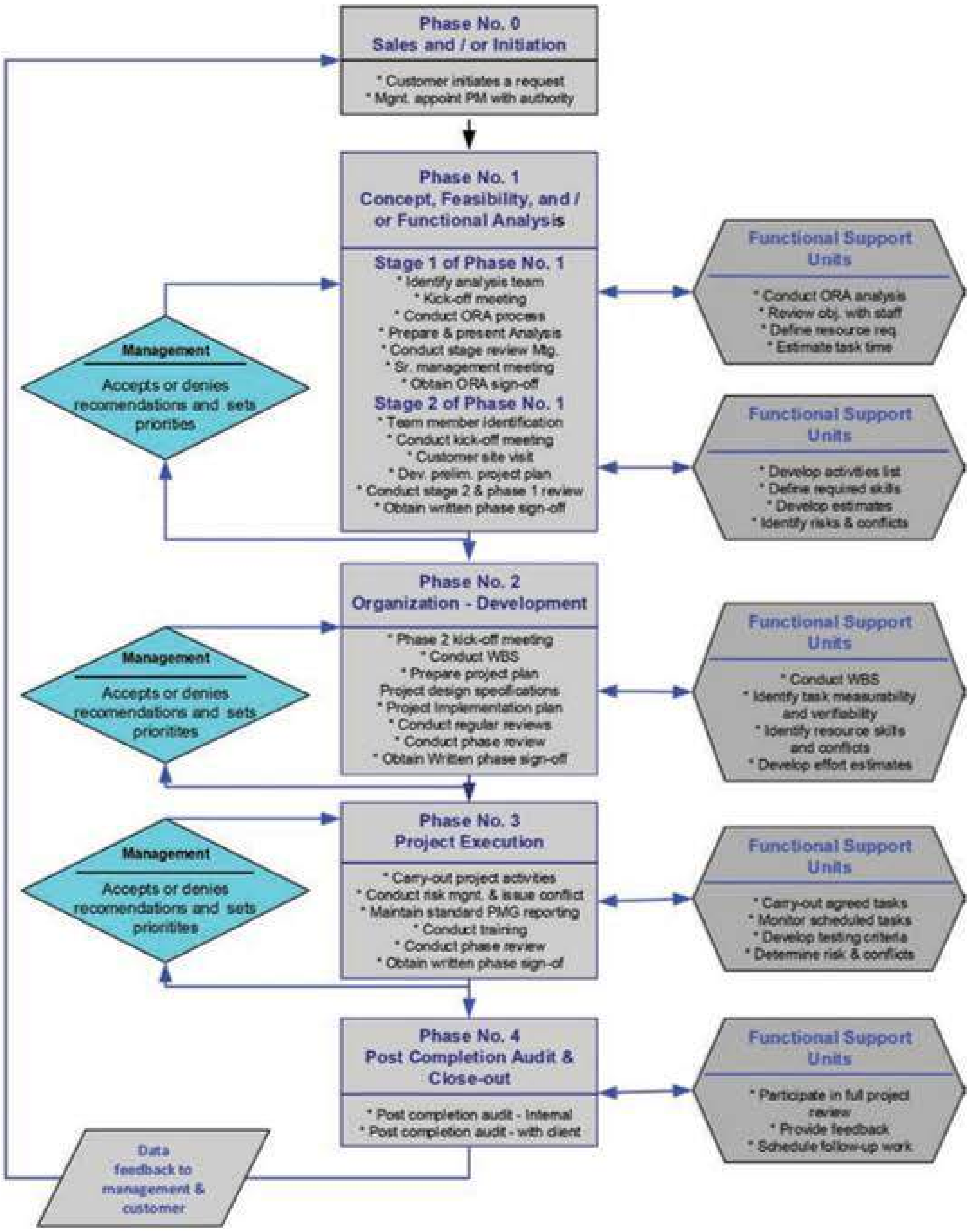
**Characteristics of project phases** are identified at completion with "agreed results" on the deliverables. The deliverables should be tangible and marked with measurability and verifiability confirming accuracy and timeliness. Each phase should culminate in a review meeting where an agreement is made to progress to the next phase or if needed to detect errors and correct before moving ahead.

Control of each phase is often referred to as a "buy-off" on a current phase and a "buy-in" to the next. A phase can include both summary and sublevel tasks and the following diagram provides an example of what might be included in a given phase.



## Typical Phase Checklist

The following provides an example of what might be designed as a checklist for each of the phases. This checklist will be dependent upon the nature and make of both the project and specifics of the individual phases.

| The ABC Corporation - - - - Supply Chain Management | | |
|---|---|---|
| **Project Title:** | | |
| **Phase One (1) Checklist:** | **Date:** | **Completed by:** |

| Item | Description | Yes | No | N/A | Comments |
|---|---|---|---|---|---|
| 1 | Was a phase kick-off meeting conducted? | ❑ | ❑ | ❑ | |
| 2 | Has the project manager been identified? | ❑ | ❑ | ❑ | |
| 3 | Has the project sponsor(s) been defined? | ❑ | ❑ | ❑ | |
| 4 | Have all necessary stakeholders been identified? | ❑ | ❑ | ❑ | |
| 5 | Has the project team been established? | ❑ | ❑ | ❑ | |
| 6 | Has a RACI chart been started? | ❑ | ❑ | ❑ | |
| 7 | Has all background documentation been obtained and identified? | ❑ | ❑ | ❑ | |
| 8 | Have all issues, risks been discussed and documented? | ❑ | ❑ | ❑ | |
| 9 | Is the project mission, vision, and value been identified? | ❑ | ❑ | ❑ | |
| 10 | Has the projects agreed results (deliverables) been identified? | ❑ | ❑ | ❑ | |
| 11 | Are the project objectives (deliverables) measurable and verifiable? | ❑ | ❑ | ❑ | |
| 12 | Have any major project constraints been identified? | ❑ | ❑ | ❑ | |
| 13 | Have project management guidelines been reviewed, modified, and published? | ❑ | ❑ | ❑ | |
| 14 | Does this project have necessary senior management support? | ❑ | ❑ | ❑ | |
| 15 | Is the project feasible? | ❑ | ❑ | ❑ | |
| 16 | Have lessons learned from other projects been reviewed? | ❑ | ❑ | ❑ | |
| 17 | Is the project ready to proceed to the planning phase? | ❑ | ❑ | ❑ | |
| 18 | Is a phase review meeting planned and/or initiated? | ❑ | ❑ | ❑ | |
| 19 | Has a buy-off on this phase and a buy-in to the next phase been obtained? | ❑ | ❑ | ❑ | |

| **Additional Comments or Phase Exceptions Noted:** |
|---|

## Task Planning Worksheet

The task planning worksheet is designed to help the project manager and team more accurately define the tasks to be performed including both the task predecessors and successors along with an effort to estimate for the performance of the tasks. The TPW is also designed to aid in identifying additional requirement for each of the tasks as seen here.

| The ABC Corporation - - - - Supply Chain Management | |
|---|---|
| **Project Title:** | |
| **Task Planning Worksheet – Summary Level** | **Date:** |

| **General Information** | | | |
|---|---|---|---|
| **Department:** | | Manager: | |
| **Created by:** | | Date: | |
| **Phone No.:** | | Email: | |

| **2. Preceding Task(s)** Title and Agreed Results Required in Order to Start Next Task(s)? | **1. Summary Level Task(s)** Required to Support Successful Completion of This Project | **Task(s)** Effort Estimate | **3. Succeeding Task(s)** Title and Agreed Results Required in Order to Start Next Task(s)? |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| **4. State Quality Issues Related to These Tasks** | **5. Unit or Person(s) Responsible for Quality** |
|---|---|
| | |
| | |
| | |
| | |
| | |

| **6. Required Performance Skills** | **7. Perceived Task Risks** | **8. Solutions for Risks** |
|---|---|---|
| | | |
| | | |
| | | |

| **9. Required Checklist(s)** | **10. Required Task Form(s)** | **11. Key Milestones** |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

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## Basic Project Forms

When managing projects, it is always better to develop a standard way of conducting business and in so doing the following forms, "Meeting and Agenda, "Change Request," and "Risk Management" should be considered as critical and standards for running projects.

**Meeting and Agenda From**

| The ABC Corporation - - - - Supply Chain Management | | |
|---|---|---|
| **Project Title:** | | |
| **Agenda / Minutes for Project Meeting Number:** | **Date:** | **Time:** |

| General Information | | |
|---|---|---|
| Location | | |
| Participants | Meeting Chair: | |
| | | |
| | | |
| | | |
| | | |
| | | |

| Item | Time | Topic |
|---|---|---|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |

| Item | Due By | Responsible | Topic Details |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |

| Item | Results / Resolutions / Action Steps |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |

| Item | Attachments |
|---|---|
| 1 | |
| 2 | |

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## CHANGE REQUEST FORM

| THE ABC CORPORATION - - - - SUPPLY CHAIN MANAGEMENT | | |
|---|---|---|
| **Project Title:** | | |
| **Change Request Form Number:** | **Date:** | **Completed by:** |

| **Additional and/or Support Materials Attached: Yes: No:** |
|---|
| **Current Condition / Situation:** |

| |
|---|
| **Proposed Change(s):** |

| |
|---|
| **Justification:** |

| **Change Management Information** | | |
|---|---|---|
| **Change Control Number:** | | **Priority(s): High: Medium: Low:** |
| 1 | **Cost Impact:** | |
| 2 | **Timing Impact:** | |
| 3 | **Schedule Impact:** | |
| 4 | **Quality Impact:** | |
| 5 | **Scope Impact:** | |
| 6 | **Deliverable Impact** | |
| 7 | **Other Impact(s):** | |

| **Change Review Committee Information** | |
|---|---|
| **Disposition:** | Approval: Disapproved: |

| **Signatures** | | |
|---|---|---|
| | | |
| **Title:** | **Title:** | **Title:** |
| | | |
| **Title:** | **Title:** | **Title:** |

| | | **Follow Up** |
|---|---|---|
| **Documentation Updated** | **Yes: No :** | **Change Implemented: Yes: No:** |

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## Risk Management Form

| The ABC Corporation - - - - Supply Chain Management | | |
|---|---|---|
| **Project Title:** | | |
| **Risk Management Format:** | **Date:** | **Completed by:** |

| |
|---|
| **Step No. 1: Define in writing a clear statement of the task and/or problem:** |
| **Step No. 2: Identify the probability of this occurrence:** |
| **Step No. 3: Identify the impact of this occurrence (on time, cost, and resource reallocations):** |
| **Step No. 4: Will there be an effect on other projects and if so what?** |
| **Step No. 5: Identify, list, and explain possible preventative plan(s):** |
| **Step No. 6: List appropriate contingency plan(s) and trigger points to imitate them:** |

| Additional and/or Support Materials Attached: Yes: No: | | |
|---|---|---|
| **Risk Management Plan Authorizations** | | |
| **Signatures** | | |
| | | |
| **Title:** | **Title:** | **Title:** |
| | | |
| **Title:** | **Title:** | **Title:** |

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## Team Member Evaluation

| The ABC Corporation - - - - Supply Chain Management | | |
|---|---|---|
| **Project Title:** | **Team Member Evaluation Form** | |
| **Team Member:** | **Date:** | **Completed by:** |

| Item | Description | 5 | 4 | 3 | 2 | 1 | N/A | Comments |
|---|---|---|---|---|---|---|---|---|
| **1** | Completes task on time | | | | | | | |
| **2** | Defines task(s) agreed results with measurability and verifiability | | | | | | | |
| **3** | Attends team meetings on time and stays until the end | | | | | | | |
| **4** | Makes positive contribution to the project and team | | | | | | | |
| **5** | Displays technical competence | | | | | | | |
| **6** | Takes responsibility appropriately | | | | | | | |
| **7** | Contributes fair share of the work | | | | | | | |
| **8** | Easy and cooperative to work with | | | | | | | |
| **9** | Works well under pressure | | | | | | | |
| **10** | Communicates well when speaking | | | | | | | |
| **11** | Assists other team members when needed | | | | | | | |
| **12** | Demonstrates good problem-solving skills | | | | | | | |
| **13** | Works well with customer(s) | | | | | | | |
| **14** | Listens well | | | | | | | |
| **15** | Coaches less experienced individuals well | | | | | | | |
| **16** | Learns quickly | | | | | | | |
| **17** | Works well by themselves | | | | | | | |
| **18** | Takes the initiative | | | | | | | |
| **19** | Reliable | | | | | | | |
| **20** | Produces high-quality work | | | | | | | |
| **21** | Handles conflict well | | | | | | | |
| **22** | Accepts feedback well | | | | | | | |
| **23** | Well organized | | | | | | | |
| **24** | Has a professional demeanor | | | | | | | |
| **25** | I look forward to working with this person in the future on another project | | | | | | | |

| **Additional Comments:** |
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SCM - PM 08