Executive Summary:
In this issue of BPTrends, we provide an overview of some of the issues involved in analyzing and designing good customer-facing processes. Increasingly, the design and management of all aspects of customer-facing processes are the keys to corporate success.

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Summary

Analyzing and Improving Customer-Facing Processes

In this issue of BPTrends Newsletter, we want to provide readers with an overview of the opportunities, technologies, and problems associated with the analysis and improvement of customer-facing processes. We purposely choose the more generic phrase, “customer-facing processes,” to provide us with the scope to go beyond narrower conceptions of how companies interact with customers. For many, for example, Customer Relationship Management (CRM) is too strongly associated with the use of packaged software applications. We will certainly consider the use of CRM automation solutions, but we want to consider quite a bit in addition to that.

The customer is always the entity that buys your company’s products. For most companies, the customer is another company, a manufacturer, a distributor, or a retailer. In other cases, the customer is an individual buying a product for his or her own use.

The customer has always been important. Peter Drucker, the dean of management consultants, once remarked: “Because its purpose is to create a customer, the business enterprise has two and only two basic functions: marketing and innovation. Marketing and innovation produce results; all the rest are costs.”[1] If possible, the advent of the Internet has put even more emphasis on the importance of the customer than Drucker suggested. Historically, individual customers were limited to buying at stores near where they lived, or from catalogs or by phone. The Internet has made Web shopping possible, and it is increasingly popular with a growing number of customers. Today’s customers can use software to examine prices and features of products from around the world and then order what best meets their specific needs.

Inversely, Internet has made it possible for some companies to reach thousands or millions of new customers, but those customers now have the ability to simply click a mouse and move to another site where they may choose to buy from a competitor.

Of course, most customers still aren’t buying online. Increasingly, however, customers use a variety of channels. Thus, some customers order online and then go into a store to actually pick up the item. Others phone in their orders, or order via a catalog and expect the item to be delivered. And if the customer isn’t satisfied with the delivered product, the return process can be even more complex, involving phone calls, email messages, on-site pickup by a delivery service, or the return of the item to a store that’s different from the unit that shipped the item.

Increasingly, it’s not enough to have a good web site, or colorful store displays, or good magazine ads. The company that wants to succeed in today’s market needs to coordinate every aspect of the customer experience and manage it as a single process. In an effort to define today’s strategy towards customers, some consultants have taken to using the acronym, ETDBW, meaning Easy To Do Business With. In essence, ETDBW puts an emphasis on the importance of the customer, while
simultaneously underlining the importance of creating an integrated customer experience. To achieve ETDBW, a company needs to consider every point at which it “touches” the customer and then coordinate them to assure that the customer has a consistent and pleasant experience.

Each of us, as individuals, can provide examples where some company has failed. We call to order an item over the phone. It goes smoothly, and we proceed to wait for the item, which doesn’t arrive. Or, having ordered the item, we go to a store where we are told the item will be waiting, and find that the store personnel don’t know anything about the order. Or, again, we search the company catalog, find the item we want, write the information down, and decide to order it from the company website. On the website we find an item that looks very like the item we want, but it has a different price, or has a different order number, or doesn’t come in the colors offered in the catalog. Or we order an item, don’t get what we want, and then find that it’s nearly impossible to return the item, reverse the order, or get a replacement. The store clerk explains that, as we ordered the item by phone, or via the Internet, we have to ship it back, since the store has no record of phone or Web orders. Every phone call seems to result in starting all over again with an explanation of who you are and what you are trying to accomplish. We’ve provided examples that emphasize individual experiences, but companies are just as likely to have these experiences in dealing with other companies.

Most companies have, as one of their four or five strategic goals, the improvement of the customer experience. The increased power of the customer to shop elsewhere, and the growing intolerance of customers for problems like those we just described, are driving business process change programs at most companies whose overall aim is to coordinate and improve customer facing processes.

Customer-Facing Processes

As we consider customer-facing processes, we will work our way through the business process architecture pyramid to assure that we cover the problem at all levels. (See Figure 1.) We will start by considering how a concern with customer-facing processes is tied to an organization’s strategy. Next, we will consider how customer-facing processes fit within the organization’s business process architecture, and how we can define and refine our understanding of customer-facing process models. Beyond that, we will consider how specific customer-facing subprocesses or activities can be managed and implemented by people or automated by IT systems.

Given the space available, we won’t be able to consider every aspect of this topic in great detail. We’ll focus on what seem to us the most important new developments and leave other topics for newsletters and white papers that we’ll be publishing in the coming year. We’ll begin by considering some of the strategic issues.

Strategic Issues

The basic strategy model that most companies use is derived from the work of Harvard Business School professor Michael Porter.[2] In Porter’s view, the strategy committee should be constantly monitoring the environment in which the company functions. It should pay especial attention to the actions of rivals within the industry. It should also pay attention to the possibility that customers will come to prefer an alternative product -- a substitute -- for the product the organization sells. Similarly, it should watch for the entry of new competitors. This has become especially important as, in some cases, the Internet lowers the cost of entry and makes it possible for companies from distant geographical locations to compete for your local customers. Strategy groups should also concern themselves with the relative power of buyers and sellers. Few sellers or scarce supplies tend to give sellers more leverage and to force prices up. Many sellers and plentiful supplies, on the other hand, tend to empower the buyer. And that, of course, brings us to the topic of this issue of BPTrends Newsletter. The Internet has given buyers more options: Using the Internet, buyers can learn about more product offerings and compare prices much more efficiently than they ever did in the past. That, in turn, has increased the power of the buyer, or customer, and is forcing all sellers to increase their emphasis on customers.

Mass Markets Versus Focused Markets

Most discussions of corporate strategies conclude that companies basically have two choices. They can sell a basic product to a large number of people, or they can sell a premium product, or a tailored product, to some niche market. Companies that want to focus on niche markets must focus on customers to define those markets. They must determine what premium features a group of customers is willing to pay for, or they must identify some special features common to a group of customers that suggest they will pay for a product or service tailored in some special way. Customers have power in niche markets, simply because there are only a relatively few customers, and also because there are usually a number of suppliers seeking customers who will pay a premium price for products or services. Customers who have lots of options and are willing to pay a premium price don’t want to put up with a hassle.

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They tend to choose the company that offers the best product and that is also Easy To Do Business With.

In a commodities market, when products or services sell with a minimal profit margin, a company can’t afford to cut prices to obtain customers. Instead, they must focus on maintaining exactly the right quality and features that most people want, while, simultaneously, focusing on making the customer’s experience as pleasant as possible. Put a different way, well organized and integrated business processes have become the key to the commodities market. Given a number of choices among equally good, cheaply priced products, customers will tend to choose the vendor who is Easy To Do Business With.

There has been a lot of discussion about efforts to use mass production techniques while simultaneously tailoring products for small groups of customers or for individuals. Although mostly experimental at this stage, this "mass tailoring" approach may become a major factor in the next few years.

Your corporate strategy committee must determine what market your company wants to be in, and whether the company wants to position itself as a mass market vendor or a niche or specialized player. No matter how they decide to position the company, however, today’s company must also worry about all the ways in which it interacts with customers.

A company might decide that its existing process is too inefficient to improve, and elect to get out of a specific business. At GE, its previous CEO, Jack Welch, was famous for saying that he only wanted to be number one or number two. If GE had a line of business that couldn’t dominate its market, or at least be the second biggest player in the market, Welch would sell the business to someone else. Other companies or CEOs may not be so extreme, but Welch’s approach underlines the competition that dominates today’s markets and emphasizes the importance of being very good in order to survive.
As we have already seen, thinking about customer-facing processes begins with a good understanding of the customer, and a well-defined way of packaging and positioning whatever product or service your company intends to offer the customer. Marketing managers tend to talk about positioning. Sales managers often speak of targeting. Business process analysts tend to speak of value chains that are organized to produce a product line or service. However you speak of it, you really can not begin to analyze a value chain until you are sure of who your customer is and what product or line of products your value chain will be designed to produce.

Once again, it was Michael Porter who formalized the approach to value chain analysis that is most widely used today.[3] Figure 3, derived from a figure originally used in Porter's 1985 book, Competitive Advantage, illustrates the basic concept. A value chain includes all of the processes that contribute to the generation of a product or service. The key idea here is that if you add all of the costs of all of the processes that make up a value chain, and subtract that sum from the income earned from selling the product, you arrive at the profit earned on the product or service. It's clear from a casual glance at Porter's value chain model that it includes a lot more than customer-facing processes. A value chain includes not only all of the core processes associated with a product, including new product design, the supply chain, marketing and sales, but all of the support processes like accounting, HR and IT, and an appropriate portion of the corporate managerial expenses, as well.

The problem with Porter's Value Chain approach comes when you sit down to define the product or service that results from a given value chain. If you were a small company that manufactured a single line of quality pencils, it would be easy. Your company produces nothing but pencils. You have a single value chain, which produces pencils, and everything your company does either adds to its ability to create and sell those pencils, or is a distraction and should be eliminated. Unfortunately, most companies produce and sell many different products and services. In other words, most companies have multiple value chains. Consider a company like General Motors (GM) which has several auto divisions, a truck division, a finance division, and even an...
that all of the customer-facing processes within a given value chain have a single person responsible for their integration and success. If the company groups lots of different specific products into a single value chain, then the manager responsible for that value chain has a lot more to coordinate, and vice versa.

**Value Chains and Business Processes**

Within each value chain, there should be a more or less independent set of business processes that are, at the most abstract level, largely the same from one value chain to the next. In effect, these high-level business processes are simply today’s equivalent of the divisions that Porter showed within his Value Chain model. Figure 4 suggests that those high level business processes include a product design process, a supply chain process, and either marketing and sales and service processes, or perhaps a combined sales and marketing process. There are, in addition, support processes like financial reporting, IT, HR and some general management functions.

In reality, Figure 4 oversimplifies the situation quite a bit. If we are talking about a complex process, like a automobile value chain, then there are multiple supply chains, multiple product design groups, and multiple marketing and sales groups. Let’s assume that GM treated all mid-priced cars as a single value chain, and tried to use the same parts and sales venues for all its mid-priced cars as far as possible. In this case, there would be different product design groups for each of the cars within the overall value chain, different supply chains that might share subprocesses or activities in common, and different marketing and sales processes as well. We used shadowed arrows behind each of the business processes in Figure 4 to suggest that whoever is ultimately in charge of that value chain is going to have to oversee multiple business processes and multiple variations of each of the general types of business process.

Creating a high-level diagram that pictures all of the business processes in a large supply chain can be a very complex undertaking. Considering how each of the high-level business processes breaks down in subprocesses and activities can easily be way too complex to picture on a single sheet of paper, even one that covers a wall in a large conference room.

Once you know how to organize your value chains, you need to drill down and define each of your business processes in more detail. As we’ve suggested in the past, we think that using preestablished business process frameworks is the best approach.
Business Process Frameworks

There has been a movement, recently, to try to achieve some standard ways of understanding high-level business processes. Most people refer to these generic models of high-level business processes as frameworks. The framework we have talked about most often in BPTrends is the Supply Chain Framework (SCOR) created by the 700 member Supply Chain Council.[4] Several groups that have worked with SCOR and been impressed with the power of this approach have tried to extend this approach.

One early effort by StreamlineSCM and Dassault Systemes resulted in an extension to SCOR that identified eight core processes, including Market, Define, Sell, Source, Make, Deliver, Support, and Return. Source, Make, Deliver, and Return are the four SCOR business processes, while the others are high-level processes defined by StreamlineSCM and Dassault Systemes.[5].

In a similar vein, Hewlett-Packard has been extending the SCOR approach for use inside HP.[6] They have created three new sets of processes similar to the SCOR Supply Chain set, and some additional processes for enabling processes. Figure 5 provides an overview of the processes defined by HP. In this case, we have focused on the HP Sales Set and shown how one of the Customer Chain subprocess, Relate, can be subdivided into seven generic activities.

As with the SCOR, the HP Business Process Management group has defined metrics for each process on each level, and has defined best practices for specific subprocesses and activities.

HP is aware of the advantage of having a broad consensus on business process frameworks. For example, the SCOR processes were defined by teams representing different companies and have metrics and best practices that reflect the collective wisdom of dozens of supply chain experts. Similarly, because all of the SCC companies agree on the SCOR nomenclature and have defined their processes with those names, and use common metrics, the SCC now has a set of very accurate, industry specific benchmarks that each company can check to determine how well its specific processes stack up. To foster more open business process frameworks, Joe Francis, the Senior Director of HP’s BPM group, and, incidentally, this year’s chair of the Supply Chain Council, is currently pushing for the establishment of two new councils, a Design Chain Council for those focused on processes for the design of new products and services, and a Customer Chain Council for companies engaged in customer facing processes.[7] Given the very generic nature of these business processes, we expect that councils will form that will be similar to the Supply Chain Council. Specifically, we expect most Fortune 500 companies will join, and that major vendors servicing these areas will also become involved. Thus, in the near future, the SCOR process should be joined by additional, generic, open business processes, and at least one of these new frameworks will be specifically designed to help companies analyze their Customer Chain processes.

HP hopes to kick-start the Design and the Customer Chain Councils by offering its already impressive work on Design and Customer Chain processes as a starting point for each council. Of course, once a hundred companies sit down to refine these processes to assure that they are broadly applicable, the HP frameworks will undoubtedly change. Notice, for example, that HP has a separate set of processes for Business Development (Marketing) and for the Customer Chain (Sales and Support). Others may push to combine Marketing and Sales into a single set of customer-facing processes. Whatever happens, in the near future, companies trying to improve their customer-facing processes may have a resource similar to what SCOR provides for the supply chain available to support the customer service improvement efforts.

Measurement Frameworks

We can’t emphasize enough the role of high-level metrics in defining business processes. Good frameworks come with preestablished business metrics that managers can use.
HP has developed some metrics for its own internal Customer Chain processes, but the development of widely accepted Customer metrics will presumably be one of the main goals of the new Customer Chain Council.

**Process Management**

Just as measurements are important, having someone responsible for coordinating all of the customer-facing processes is also critical. We are ignoring both in this issue, but intend to devote a newsletter in 2004 to the management and measurement of customer-facing processes.

To underline the importance of this issue, and the importance of treating it broadly, it's worth noting that its customer-facing processes are not confined to the Customer Chain or to Marketing. Researching new products is often a key customer interaction in certain industries. It can be a way to let the customer know that you care about their problems and are making an effort to improve your product or service to better serve them. Similarly, how your supply chain handles delivery and returns contributes to the overall customer experience. To focus the reader's attention on this, we have highlighted processes that can form a part of the customer's experience in yellow on Figure 5.

It's one thing to have a single manager responsible for the Sales processes, or a single manager responsible for Marketing, but if your company is to guarantee that a
customer has a consistent experience, and you want to assure that all your company processes work together to provide such an experience, you will need someone at the value chain level to assure that the entire value chain focuses on assuring that your company is Easy To Do Business With.

**Defining Processes in More Detail**

Frameworks like SCOR and eTOM can help companies quickly develop state-of-the-art high level architectures and high quality measurement and benchmarking systems, but they tend to lie above the level of actual implementations. If you were to use the HP enterprise framework described in Figure 5, for example, you would still have to decide how to implement subprocess R3.2: Assign Account Team. Perhaps the team manager would do it based on intuition and experience. Perhaps a software system would do it based on digital schedules and a set of rules built into the application. More likely, a manager would do it by sitting at a computer and checking digital schedules and then sending some email to check on availability, and so forth.

However it was done, if your company is to have really well-organized and coordinated processes that are both efficient and that provide the customer with a high-quality experience, some thought is going to have to go into it. For most companies that will mean some process modeling of the Assign Account Team subprocess.

We won’t go into the details of process modeling in this newsletter, but we want to make two observations. First, different modeling tools support different notations. Some of the details, like the shape of the activity boxes, aren’t too important. What is important, in our experience, is for modelers of customer-facing processes to use swimlanes, and, very importantly, to place of the Customer swimlane in a distinctive location. If you use horizontal swimlanes, the Customer lane should be at the top. If you prefer vertical swimlanes, then the Customer lane should be at the left-hand side. We picture a section of a process diagram with horizontal swimlanes in Figure 6.

Too many analysts, in our experience, treat swimlanes too casually and don’t get all the value from them that they should. Process swimlanes were invented by Geary Rummler and Alan Brache and first described in their 1990 book, *Improving Performance*. [8] They argued that the Customer swimlane should always go on the top to emphasize the importance of the customer relationship. IBM business process analysts in the mid-Nineties created their own version of the Rummler-Brache approach, and called their approach LOVEM, which stood for *Line Of Vision Enterprise Modeling*. The phrase Line of Vision referred to the line between the customer swimlane and the rest of the swimlanes, which we’ve highlighted in Figure 6. The emphasis on that line provided the analyst with a very clear idea of every point at which the customer touched the company, and provided a clear idea of who within the company was responsible for each customer-facing
interaction. We suggest that anyone who wants to assure that their company is Easy To Do Business With will need to know each of those touch points, and there’s no better way to identify them than with a diagram that highlights the customer touch points right at the top of any process diagram.

This approach also facilitates the development of good Web portals. If you revised the process diagram shown in Figure 6 and inserted a new swimlane, but below the Customer swimlane, and labeled it Web Portal, you would see all of the uses that customers might choose to make of the portal, and that, in turn, would suggest what elements might be included in your portal design. It would also suggest applications that would need to be integrated to support a single portal.

A second suggestion: Many companies are developing processes that interact with customers that are other companies. In many cases, the supplier and the buyer will exchange information about their respective processes. Thus, in many cases, you can obtain a good idea of your customer’s process and then compare to see where your process touches your customer’s process. It’s as if you set two sets of swimlanes one above the other. The upper set of swimlanes shows your customer’s processes and the lower shows yours and the lines linking the two show how they interact. By studying such a set of diagrams, you can often see how you could change your processes to make your customer’s processes more efficient. In a sense, this is exactly what many companies are trying to do when they seek to coordinate their supply chains.

We suggest that in some cases, it’s worth extending this idea to interactions with individual customers. In essence, imagine the life of your customer and create a process that shows how your customer might seek to acquire your product or use your service. In a sense, this is simply an exercise to better understand your customer and how he or she uses your product or service. If you create several alternative scenarios, and begin to think like your customer, you can occasionally begin to see how you could shift your processes to better support the customer.

Implementing Process Designs

At this point we shift from the Business Process area of the process pyramid to the bottom sections that focus on process implementation. Assuming you have defined your customer-facing processes, you need to examine each activity and decide how best to implement it. The SCOR framework provides a discussion of practices that different companies have found most effective, and, presumably, a Customer Chain Framework would provide something similar, but, in the meantime, you need to consider implementation on your own. You have, essentially, three options. You can improve the way your managers and employees perform, you can automate the processes and hope that the automated system will perform the activity in a manner that the will better please the customer, or you can do a combination of both, as banks do when they offer their customers the option of using an Automated Teller Machine (ATM) or a live human teller in a bank office. Different groups of customers prefer one or the other, and some shift from one to the other, depending on the specific task they want to perform.

CRM and Human Performance

Normally, we'd spend quite a bit of time on the human factors involved in implementing customer-facing processes. While automation has certainly proceeded rapidly in various customer-facing areas, especially when the interface is between companies, for many situations, human contract is still the key. Selecting and training people, motivating sales people, teaching employees how to access information and help customers are all key parts of any comprehensive effort to improve customer-facing processes. We considered some of the human performance issues in the April 2003 issue when we discussed how to analyze an activity. Specifically, we considered some of the problems in analyzing sales activities.[9]

Six Sigma has also been a major source of ideas for customer-facing process change. As a generalization, Six Sigma customer efforts have focused on assuring that employees provide better, more consistent service.

Employee training or Six Sigma programs are important, but equally helpful are efforts to improve the ways that managers manage the employees who work with customers. In may cases, just arranging for managers to provide employees with more information about results, or empowering employees to take more aggressive action to solve customer problems, results in major improvement.

We aren't going to go into detail about human performance simply because it is too large a subject to fit into the space allowed. Instead, in this issue we will focus more on some of the automation issues associated with customer-facing

The Automation of Customer-Facing Processes

Just as we don't have room to consider all of the human performance aspects of customer-facing process implementation, we can only discuss some of the automation issues. We will ignore customer software development, portals, automated process monitoring (BAM), and infrastructure issues, all important in their own right, and focus here on packaged applications, CRM and the emerging use of Web Services to facilitate customer-facing application designs.

Packaged Applications

In the mid-Nineties, most major companies began to invest heavily in packaged application suites which are usually called ERP (Enterprise Resource Planning) suites. Most early ERP suites were designed to systematize and automate support processes, like finance, accounting, human resources, and inventory reporting by moving to applications that all used the same database and the same middleware.

Packaged applications are a mixed blessing. For most companies, they represented a major step forward by moving a wide range of company applications to a single database and by using a single middleware approach to communicate between the applications and the databases. They made fast, company-wide reporting possible, in many cases for the first time. On the other hand, ERP suites were developed on technology that was popular at the beginning of the Nineties, that is usually characterized as a client-server architecture. In essence, a client-server model typically assumes a desktop PC client and a database and program management system that resides on a server, typically a Unix machine. The middleware is designed to link PC servers to the workstation client and relies on a middleware approach that usually isn’t very easy to modify once it is established. The client-server approach became popular in the early Nineties, since it offered a cheaper alternative than the mainframe systems that most companies were using at that time. The good news is that packaged applications based on the client-server model replaced older systems with much better applications and improved corporate reporting. The bad news is that the applications aren’t very flexible, and, once installed, often can not be changed as new opportunities present themselves.

In the past few years, most companies have begun to shift toward multi-tiered system that rely on the Internet and Internet-based protocols like XML to provide the middleware. The new Internet designs link modules that are usually called components or services in a "loosely coupled" manner that can often be re-linked dynamically, as the situation demands. This newer, more flexible approach is usually termed a Web Services architecture.

Software architectures guide programming choices, and software, once developed to support one architecture is often very hard to change if you want to support another. All of the early ERP vendors have struggled to redesign their early software applications to support a Web Services approach. They have had mixed success. Few companies will move away from their installed base of ERP applications, but many will choose to build new applications using newer technologies.

CRM Packages

In the late-Nineties, when everyone became enamored with the Web and as customers began to want to interact with companies online, there was a general rush to Customer Relationship Management (CRM) suites. CRM covers a wide range of applications. Some were traditional sales or marketing applications that were simply renamed CRM to take advantage of a fad. Some were modules hastily assembled by ERP vendors, like SAP and PeopleSoft, to allow their existing clients to use their existing ERP databases and middleware as they automated customer-facing processes. Some were freshly developed to provide companies with customer-facing portals and to use the Internet to link the company with its field sales people. Several were created to integrate the call centers with email and portal sales channels.

By far, the most popular of the CRM suites is the one currently offered by Siebel. In its analysis of the CRM market, Gartner suggests that Siebel is the only player in the top right corner of its Magic Quadrant, placing SAP, Oracle, and People in the bottom half of the Quadrant, suggesting that they are considerably less able to execute. (Gartner indicated that Siebel had $675 million in CRM revenue in 2002.) Figure 7, slightly modified from a recent Siebel-IBM advertisement provides an overview of the current Siebel architecture.

Consider the key features in Figure 7. At the top, in pale yellow, there are five rectangles representing channels that access customers. Immediately below the customer-facing channels is a rectangle marked Customer-Driven Business Processes. Presumably, Siebel expects different companies to have different processes, and leaves this box for
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customers to “insert their specific processes.” Below the processes, in the blue space, are sets of software components that Siebel offers. They are divided into Sales components, Service components, and Marketing components. Arrows suggest that they are related to each other in various ways.

Below the software components is a process integration layer represented in green, and, below that, a set of databases that store the information collected or created by the various software application components.

It’s a reasonable architecture. In fact, Siebel not only provides generic CRM modules, but a wide variety of industry specific modules. The problem with the Siebel approach, as with all packaged CRM products, is that it’s a “bottom-up” approach. It provides software applications, and assumes that companies will change their business processes to reflect the applications on offer. Most companies attempt a compromise, which involves modifying the Siebel modules to better reflect their processes, but this can be a difficult and often very costly retrofit. Siebel, and the other packaged vendors, have argued that they offer a wide variety of discrete modules or components and that a company can use those they need and assemble them in whatever way best suits the company’s goals. In part, this approach is valid and helpful, and, in part, it still puts more constraints on the process designers than most would wish.

In the late Nineties, when many large companies felt considerable pressure from a wide variety of new Internet startups, they became a bit disparate, and began to buy

Figure 7. The Outsourcing Client must manage the Vendor
and try to install a wide variety of different CRM solutions. In hindsight, much of the money spent on those CRM applications was wasted. In 2001, with the collapse of the “dot.com” stock market bubble, many of the new Internet challengers disappeared. As companies have worked their way through the wreckage and the recession that followed, the clear message is that most customers prefer to rely on multiple access channels. It’s not a matter of selling all the stores (bricks) and moving to the Web (clicks); it’s a matter of creating complex processes that allow customers to see things online, then visit a store to examine them more carefully. Or, the customer may order online, but then drop into a store to pickup the item ordered on line, or to return the item if it isn’t as expected.

No one doubts the importance of the Internet and the Web. They are systematically changing the way customers and companies do business. It isn’t a matter of the Web replacing other channels, but, instead, it’s a matter of integrating the Web into a total offering. This, in turn, has resulted in greater complexity and major challenges. As we have already suggested, companies must coordinate data from call centers, from stores, from email, and from the Web so that all the various company employees who interact with the customer have the same information.

All this is not to suggest that many companies haven’t benefited greatly from their use of CRM applications or that most companies aren’t still exploring the use of packaged CRM applications. What it does mean is that companies are being much more careful in the way they approach customer-facing automation, laying more stress on integration and flexibility.

Web Service Designs

When we first discussed packaged applications we suggested that they were designed using a client-server architecture and that, once installed, they were difficult to modify. Most CRM applications were designed with the client-server model in mind, and reflected its weaknesses.

The major transition taking place in IT at the moment is a shift from applications that run within a company using a client-server design to a looser approach based on new Internet standards like XML, SOAP, WSDL, and UDDI. The approach is often referred to as a Web Services approach, or as an Open Services Architecture (OSA). The essence of this approach is that companies create processes which are implemented by a variety of components (Web Services) that are accessed over the Web. In the most extreme version of this vision, a company might not own the components it uses, but simply “lease” their use, as needed.

An early example of this approach, now popular with many companies, is Salesforce.com. Salesforce.com, the company, has created a series of components that companies can use to manager their field sales people and to track their customers. One doesn’t buy these applications, however, but simply leases them from Salesforce.com, and accesses them, as needed, online. Thus, a sales person from your company can access a Salesforce.com application from a browser on a laptop while in the customer’s office and record customer and sales information. Later, your company sales manager can access the Salesforce.com site and download customer information and obtain a sales report. Some companies are nervous about leaving their company data on a vendor’s database, but it is ultimately no different than contracting with a Call Center Outsourcer who handles all your company’s interactions with your customers and keeps data on all the calls. Many companies have embraced Salesforce.com and love the ease with which salespeople from anywhere in the nation can sign on and access customer data.

The whole Web Services approach is new, and standards are still being developed to support it. It will be several years before the SOA approach is as well understood as the client-server approach now widely used. Still, the transition is under way and seems likely to gain momentum rapidly.

Recognizing the inevitable, all of the major packaged vendors are making an effort to transition to more component-like modules and Web standards like XML. Siebel has taken a lead in this transition by teaming with IBM and offering its CRM components via IBM’s Business On Demand initiative. In essence, Business On Demand refers to the fact that companies can access online modules when they need them and lease the services of those modules. The joint Siebel-IBM effort combines Siebel’s Universal Application Network, introduced in 2002, with IBM’s WebSphere middleware to make it possible for companies to access Siebel modules in a manner similar to the way other companies access Salesforce.com components.

SAP is developing its own SOA architecture (xApps) and is moving in a similar direction, and Oracle and other packaged vendors are also making efforts to develop a better Web Service infrastructure.

Business Process Languages for the Web

An interesting development is the creation of Business
Process languages designed to integrate with the SOA approach. BPEL (Business Process Execution Language) is currently working its way through the OASIS standards process, and is already being used in some early applications. In effect, one uses a language like BPEL to create a business process description. One can either describe the process in code, or by means of a workflow-like diagram as in BPMN (Business Process Management Notation) which is also working its way through standards groups. A BPEL “application” describes a business process. As the BPEL engine processes the “application,” it moves from one step in the process to the next. If an application is needed at any given step in the process, the BPEL engine would go online and access the needed Web Service. Thus, in effect, BPEL is designed to allow business analysts to create and manage Web Service processes by creating a process description when is then used to coordinate the process. Some theorists argue that a BPEL “application” could coordinate both the human participants and the automated modules that comprise a complex process, but most early implementations are focused on managing only automated modules.

It’s too early to predict how popular business process languages might become. At the moment, any company attempting to use BPEL or any of the similar languages, like anyone attempting a large Web Services application, is taking a risk and using technology that hasn’t been widely tested. Some companies will take the risk in hopes of an early competitive advantage; most will wait until the technology is more mature and has been proven.

From our perspective, the business process languages are a mixed blessing, and their overall effect will depend on issues that are not yet resolved. We feel strongly that companies should work in a top-down manner and begin by designing effective processes that are designed to achieve corporate goals. Software applications should be created or acquired to support well-designed processes, and not the other way around. Companies that acquire applications first and then attempt to create processes that make use of the applications are setting themselves up for trouble. That’s exactly what happened when companies rushed to buy CRM applications in the late Nineties, before they really understood how e-commerce processes would help their business achieve its goals.

If business process languages like BPEL really empower business managers and analysts and facilitate the design of high-quality business processes, then they may restore the balance that has, in too many cases, shifted to IT. On the other hand, if BPEL and languages like it are used to drive bottom-up automation efforts that are introduced by IT without sufficient thought on the part of business managers, then it will prove part of the problem and not part of the long range solution.

The OMG’s MDA Approach
The Object Management Group’s Model Driven Architecture constitutes another major process automation initiative which we will consider in more detail in January of 2004. At that time, we will focus on MDA examples that demonstrate how this approach can be used to improve customer-facing processes.

Business Process Outsourcing
We have spent the last two issues of BPTrends Newsletter on Business Process Outsourcing. Suffice to say that one option for improving any process, including a customer-facing process, is to hire the process done by an outside company that can perform the process better than your company can. Most companies have concluded, for example, that outside organizations can manage and run call centers better than they can, and have outsourced their call center operations to call center outsourcing vendors.

Summary
This newsletter has provided an overview of some of the issues facing managers who seek to improve their customer-facing business processes. In the space available, this initial issue of CRM has necessarily been a cursory review. Indeed, we have focused mainly on illustrating the variety of options the manager faces, at the most abstract level. Thus, we used our Business Process Architecture pyramid to help focus readers, successively, on Strategic issues, on Architecture, Measurement, and Process Modeling issues, and then on Human implementation issues, and on Automation options.

Some companies have one or another of these areas under control. Most, unfortunately, find that they need to work on all of these areas, simultaneously, and often struggle to know where to begin. Customers are the key to every company’s survival, and hardly anyone can ignore making sales today while they revise processes in order to make more sales tomorrow. In reality, everyone is faced with doing several things at once. Over the long run, we believe that organizations achieve what they aim for, and that very successful organizations are successful, in large part, because they establish clear goals and focus on achieving them. So we stress strategy and understanding the market.
in which your company operates. After that, we stress defining processes that reflect your organization’s strengths and that are designed to achieve your strategic goals.

Too many organizations have overreacted to technological changes in the marketplace and internal pressures from their IT organizations and attempted automation projects that have not achieved either their strategic or their promised goals. In most cases, this has occurred when organizations launched automation efforts and bought packaged applications before they had figured out how those automation efforts would support or improve their business processes.

We understand that business process analysis and design efforts are time consuming, and that it's tempting to put them off in the heat of competition and try to simply buy a solution from a software vendor. For that reason, we are particularly impressed with the current development of business process frameworks. SCOR seems to have provided many companies with a high-quality, flexible supply chain architecture which is achieved faster and cheaper than a tailored, internal effort. We are hopeful that the new Customer Chain Council will result in something equally as useful and powerful that managers can use to improve their customer-facing processes. Obviously, this will only happen if many large companies decide this is in their interest and join the Customer Chain Council and work to create a common, open Customer Chain framework.

Once a standard Customer Chain framework is available, we hope that packaged and Web Service vendors will orient their offerings around the processes so that business managers can work in a top-down manner as they develop and change their processes, and not vice versa. This is already beginning to happen in the area of the supply chain, and, with luck, it could be happening in the customer-facing domains within a year or two.

As far as implementation is concerned, every company and manager needs to do a balancing act that weighs the costs and benefits of relying on people and working to improve their performance versus relying on automation efforts. In the past two years, many companies have found that they have achieved more, at less cost and far less risk, with human performance improvement efforts than they would have achieved with a similar investment in automation. This is especially the case at the moment because IT is going through a transition from client-server architectures and applications to Web Service architectures and applications. In the long run, automation always provides the greater paybacks by eliminating salary costs, but this is only true if the automation really works and if it satisfies the customer.

We began by suggesting that most companies have set a goal to be Easy To Do Business With. Customers keep changing. For many, doing business with a person is still far easier than interacting with an automated phone system or a portal. For others, the convenience of email far outweighs more personal interactions with employees. Most companies need to continue to evaluate their customers and revise, and then revise again, their customer-facing processes to assure that their customers remain happy.

Notes

[4] Supply Chain Council and SCOR. For more information see white papers on BPTrends, or visit the SCC website: www.supply-chain.org
[5] StreamlineSCM and Dassault Systemes Enterprise Transaction Model. For more information, check www.streamlinescm.com
[6] HP’s Analysis of Business Processes has been described in papers given at SCC conferences and in conjunction with the organization of the Customer-Chain Council. If you are a member of the SCC, check Joe Francis’ papers from the recent US SCC conference.

There are dozens of good books on customer-facing processes. If we were forced to recommend only one book on customer-facing process improvement, it would be Services Blueprint, which only treats customer processes as one of several processes, but which treats it broadly and very intelligently. If, on the other hand, you wanted a book on CRM, on the problems of using packaged applications, then I would recommend Françoise Tourniaire’s popular Just Enough CRM, which seems to say all that needs to be said in a very efficient manner. The specifics are:


There are a number of CRM websites and conferences, though none that we know of that have focused, broadly on customer-facing process issues. For a website that is associated with a CRM conference, see DCI's website: www.dci.com

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