The Evolving Importance of e-Service in Go-To-Market Strategies for Web-based Enterprises

A White Paper on e-Service Strategy

Introduction

Where to differentiate? In a world where many e-Business applications are fast becoming commodities, how do enterprises find ways to set themselves apart in the hyper-competitive global marketplace?

In an environment where e-Business components provide new opportunities for addressing these questions, many organizations are finding their answer in e-Service.

There are compelling reasons why e-Service is a major go-to-market strategy for to today's web-based enterprise. This white paper provides the framework for organizations to consider the positive impact of e-Service on their corporate e-Business strategies.

Executive Overview

e-Business Overview

A brief history of the evolution of e-Business can be viewed, as a three-tiered pyramid comprised of e-Commerce, e-Supply Chain, and e-Service as shown in Figure 1. Early e-Business solutions consisted of a web presence with the company’s mission statement, general company information, brief product descriptions and a company telephone number to call for transacting business. It was enough to say “check out our web site at …” to show your company’s differentiation. Shortly thereafter, companies began serving up product catalogs and electronic “shopping carts” for customers to place orders online. These online selling functions became generally known as e-Commerce solutions.

With the nearly overnight success of e-Commerce came a new set of challenges for companies looking to differentiate themselves on the Internet. The opportunity came when consumers and business users of e-Commerce solutions began demanding more visibility into the supply chain processes necessary...
to complete business transactions. e-Business solutions which provided functionality such as product visibility for available-to-promise (ATP), product configuration, credit status, and shipping options “raised the bar” in the competitive marketplace. Companies providing e-Business channels began to expose their back-office information, utilizing their e-Supply Chain capabilities as a means of differentiation. e-Commerce and e-Supply Chain solutions have since flourished to the point of becoming commodity e-Business offerings; providing little differentiation between e-Business solutions.

The bar is again being elevated. The new battlefield is focused on e-Service. Now that consumers and businesses can place orders online and have visibility into the supply chain process, they are expecting even greater levels of service after the product has been sold and shipped. Product warranty and contract visibility, scheduling of field service personnel, returns and repair functions, spare parts ordering, and customer self-service are becoming new competitive weapons for e-Business solutions. It is in this new arena that real customer loyalty is created.

For many companies, e-Service may provide the greatest return on investment (ROI) and sets the foundation for adding and integrating other e-Business functionality in the future. It is the purpose of this white paper to identify the essential components of a successful e-Service solution and provide a roadmap for a product-oriented e-Service strategy.

**Note to Reader:**

*To find out why e-Business means much more than browser-based software, please request the white paper vision statement entitled “Metrix e-Business Products: Strategy and Positioning” available on the Metrix, Inc. web site at www.metrix.com.*

### e-Service Overview

### e-Service Components

The foundation components of an e-Service solution are comprised mainly of the traditional service functions found in most product-oriented companies today. A durable goods manufacturer offering service typically provides capabilities for:

- Call Management for problem resolution and call escalation
- Dispatching and scheduling of field service personnel
- Handling returns and product repairs
- Maintaining service level contracts and product warranties
- Managing spare parts inventory and logistics functions
- Building and enhancing a service knowledge base
- Service Invoicing
Customer Engagement and Support Levels 1-3

Traditionally, the support Call Center acted as the customer’s entry point into the service organization (see Figure 2) commonly referred to as Level 1 Support/Service. Call escalation progressed from Level 1 through to Level 3 Service to provide the correct level of service or support. In addition, field service dispatching, product returns, and visibility into contracts/warranties are managed at any point in the process.

Level 0 Support- Customer Self-Service

In an e-Service solution, customer entry into the service organization is achieved by means of a service web page (see Figure 3)- creating a new level of support, level zero. Through the service web page the customer can transact service related issues in a “self-serve” manner. Customer self-service offers a true 24x7 support structure for service transactions and problem resolution. Customer self-service functions include a number of the traditional service functions that are straightforward and efficient, such as:

- **Generating Service Requests** - Offering customers the ability to generate field service requests such as scheduling installations and preventative maintenance calls can significantly reduce call handling for the Contact/Call Center. Workflow rules which manage field service schedules as well as spare parts inventory, provides the customer with true ATP scheduling of technicians. Combining workflow rules such as automated notification and dispatching gets the right technician, with the right parts, at the right time, to the right location.

- **Problem Resolution** - By providing an automated knowledge base system, customers can work through case-based solutions to their problems. Solving the customer’s problem at this stage in the e-Service process saves both time and expense.

- **Generating Returns (RMAs)** - Customer generated returns maximizes call avoidance while providing the customer with visibility into the returns process.

- **Spare Parts Ordering** - Significant opportunities exist for cross-selling and up-selling by providing a robust spare parts ordering function. ATP inventory capability, combined with an e-Commerce product catalog can eliminate time-consuming parts ordering activities for call handlers and field service technicians.
Contract and Warranty Visibility – The ability to view service level agreements and product warranty information offers the customer visibility into their business relationship with the service organization (e.g., Is the service organization meeting their commitments; when placing an online order, what products are under warranty).

Contact/Call Center - e-Service solutions should be integrated with Contact/Call Centers. It is important to remember that an e-Service solution should provide the ability for the customer to opt-out of the self-service model and speak directly with call center personnel. The customer should be offered the ability to initiate a “live” call with customer support representatives at any time in the self-service process. There are instances when there is still nothing more effective than providing customer service with human interaction whether it be via the phone, email or by chat. Once the customer has initiated the “live” contact with the Contact/Call center, call handlers must be provided with the same functions (dispatch field service personal, generate RMAs, order parts, and have visibility into contracts…etc.) offered in the self-service model.

In addition, representatives should have the capability to transition calls to the appropriate level of support while capturing information and steps already taken for problem resolution. Capturing this information and making it visible in the e-Service Engine for all service level representatives avoids having customers replicating steps and becoming frustrated with the service experience.

e-Service Engine

In an e-Service solution, functional components are automated and managed by a product service oriented, n-tiered, software application acting as an e-Service engine (see Figure 4). A comprehensive e-Service engine also provides Workflow and Business rules management to provide service automation and visibility for all users throughout the service management process.

Workflow and Business Rules

Essential to an effective e-Service solution are rules-based logic tables to address decision-making based on your business rules. The logic tables will draw from any necessary data in your e-Service Engine (e.g., an alert regarding a large pending order with the same customer currently in progress, etc.) and decide on next actions accordingly. The tables will make all decisions for which they have appropriate data. If there are holes in the data, the system allows management by exception … an immediate alert to the appropriate individual to make the needed decision.

Management by exception should be implemented through workflow rules and automatic escalation procedures through triggers and alerts (e.g., a customer indicates a part order is urgent, given who the customer is, what the product is that they are looking for and due to on-hand quantities being below a
designated threshold, the urgent request will be escalated to the most appropriate staff to expedite picking, packing and shipping of the order.

**e-Service Implementation Strategy**

**Service Organization Goals and ROI**

An implementation strategy for an e-Service solution should take into account the service organization’s business goals and the potential ROI opportunities. Using an ROI strategy will help define a phased approach to implementing the complete e-Service solution.

**Service Goals** - Before implementing an e-Service solution, take the time to define your organization’s business goals. Typical high level goals of any service organization include:

- Improving Customer Satisfaction
- Improving Productivity
- Decreasing Costs
- Exploiting new service revenue opportunities

Before implementation, take these goals down a few levels and identify where the best possible return on investment opportunities exist.

**Return on Investment Opportunities** - As shown in Figure 5, the earlier in the support process a call can be addressed, the greater the savings. Service costs significantly increase as the call is moved from self-service through to Level 3 support. Costs can range from under a dollar in the self-service stage, to potentially thousands of dollars once the call requires engineering involvement.

After identifying your service organization’s goals, look for high volume, low complexity transactions that may lend themselves to a self-service approach. Several key areas may provide ROI opportunities:

- Call Avoidance – Offering customers the ability to generate service requests, view service request status, place spare parts orders, generate a product return, and viewing of contract and warranty information, will significantly reduce the number of calls handled by the contact/call center. In addition, Customers who can self-diagnose problems using a knowledge base can significantly reduce the required contact/call handlers for a service organization.
- RMA Avoidance – Product returns can be reduced if the customer can successfully diagnose product issues with the help of a knowledge base. Also, by allowing the customer to generate an order for a replacement part (could be at no charge based upon contract or warranty information) as early as Level 0 in the process can greatly improve customer satisfaction.

- Revenue Opportunities – Effective up-selling and cross-selling of products can be achieved in the customer self-service model. Many companies have tried to attain this through their call centers with mixed results. This can also be an effective strategy for driving customers to use a self-service model. Providing a discounted price for spare part orders online may drive more users to your web site.

- Business-to-Business Service Offerings – Providing contract and warranty visibility to customers can become an effective selling tool for your sales force. By offering contract quotes and “what if” scenarios, customers can build the correct level of support with your organization.

**Phased Implementation Approach**

Once you have identified your service organization’s goals and ROI opportunities, develop a multi-stepped plan for implementation. As a rule of thumb, identifying high volume, low complexity, transactions that provide the greatest ROI, should prioritize initial functionality.

**Step 1 – Get Control** – As with most implementations you will want to walk before you run. First, get control of your service organization’s inventory, contracts and warranties, repair center, field service and resources. Implement a product service oriented, n-tiered, e-Service engine. Integration with other enterprise systems can be handled at this step as well.

**Step 2 – Provide Customer Self-Service** – Implement the functionality required for your self-service model. Are you handling high volumes of spare parts ordering, or would knowledge-based problem resolution have greater ROI potential? Remember self-service functionality can be phased over time as well. Make sure it integrates with your Contact/Call center.

**Step 3 – Enable Integration with Suppliers** – XML integration with suppliers will greatly shorten delivery times and enable your customer-added visibility into your service organization.

**Step 4 – Use Advanced Functionality** – Expose Business-to-Business and Business-to-Consumer Key Performance Indicators. Once your e-Service solution is under control, you can begin to expose performance metrics with your business partners and consumers. Web-based reporting on response time; turnaround time and contract profitability may add competitive differentiation against your competitors.

**Technology and Integration**

**Why is an N-Tiered Solution Necessary?**

A basic understanding of n-tier architecture, its benefits and capabilities aids the evaluation of any e-Service solution. Before the advent of today’s powerful servers and object interaction protocols such as CORBA and DCOM, application service providers (ASPs) built their applications on a two-tier architecture. The databases for these applications reside on the host server, while the business logic...
and user interfaces reside on each individual desktop PC used to access the application — hence the term, “fat client.”

This keeps the demands on the server relatively low, and leverages the power of desktop PCs. But, it also necessitates that large amounts of data move over vast networks as fat clients access information. In addition, it makes upgrading an unwieldy task. If 500 companies with an average of 200 licensed seats use a two-tier system, the vendor would have to upgrade 100,000 PCs to make its entire installed base current. One can see how this problem expands exponentially as long as any application remains two-tiered.

Conversely, an n-tiered architecture is component-based. Under this model, the database resides on a host server, while business logic objects reside on other servers in the same physical proximity as the database. Users’ PCs only house the user interface. Essentially, this model is the same architecture as the Internet: users deploy an interface, or browser, to access components and data all housed on servers. This eliminates the need for vast amounts of raw data to move over networks, and makes upgrading a less complex logistical task. Most importantly, it makes the addition of web functionality a more realistic and attainable goal.

**Integration within the Enterprise**

As stated in the executive overview, e-Service is an essential component of an overall e-Business strategy. Other enterprise applications, which support the selling, marketing, and fulfillment functions, must be integrated to support the entire e-Business solution. Using Enterprise Application Integration (EAI) and Extensible Markup Language (XML), real-time transactions can be achieved with Enterprise Resource Planning (ERP), e-Commerce, and Sales Force Automation (SFA) and legacy systems.

**Business-to-Business Integration**

By integrating with suppliers, service organizations can shorten the delivery time and extend visibility to the customer. High velocity service chains can be created which provide significantly improved response times for service organizations. As an example, business-to-business integration with parts supplier’s systems via XML can extend available/capable-to-promise (ATP/CTP) functionality outside the four walls of the service organization.

**Summary**

In closing, implementing an e-Service solution may provide the greatest return for your e-Business solution dollar. If you are already heading down the e-Business solution pathway, take a close look at how e-Service can differentiate your solution. Keep in mind the points addressed in this white paper:

- Before implementation, take the time to clearly define your service goals.
- Based upon your organization’s goals, use ROI opportunities to drive your phased implementation strategy.
- Acquire an e-Service solution that meets the requirements of a product-oriented service organization. Make sure you have an n-tiered architecture so that you have access to all business object components via HTML interfaces.
- Implement your solution in phases and you can achieve significant ROI and increased customer satisfaction.