

# **Creating The IT Service Delivery Utility**

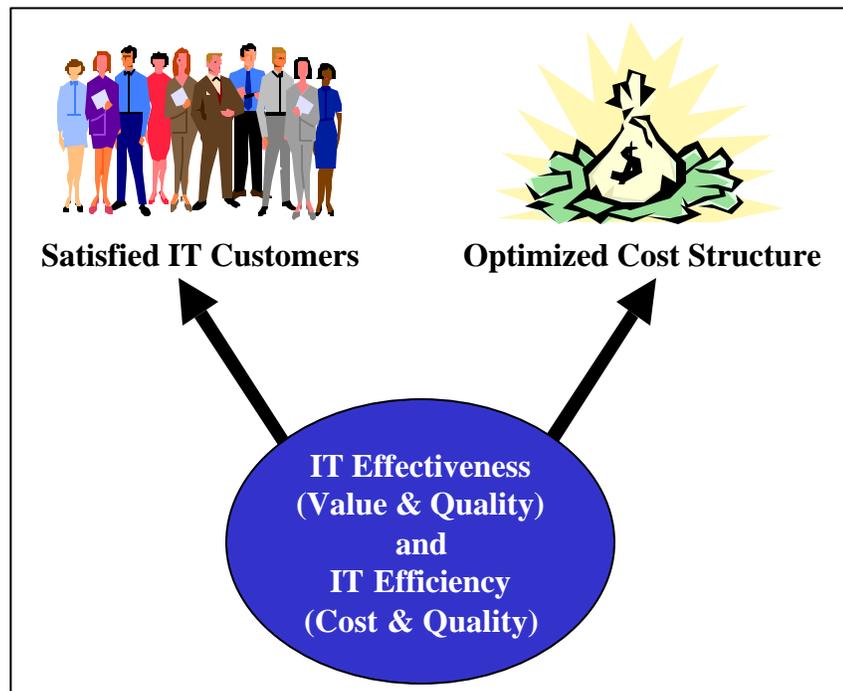


## Overview

We all know what happens when you pick up the telephone. You get a dial tone. The service is available. If you need help, no matter where you are or what your problem or request is, just press zero. At the end of the month your bill arrives, detailing your usage of services and the cost of services. You get efficient and effective services to meet your requirements, coupled with responsive support, at predetermined fees for which you have agreed to pay.

Today's telephone service can serve as a model for the Information Technology (IT) department in its efforts to align with business goals and deliver effective and efficient services to business users. This white paper presents a perspective on how IT can refine itself into a service delivery utility through defining end-to-end service delivery processes that link the IT department's people, processes and technology. The main benefits of this approach are:

- Improved IT customer satisfaction
- Optimized IT costs through improving operational efficiency and effectiveness
- Enables the development of meaningful service level agreements with business users in order to align IT services with business goals and objectives



## Comparing the Telco and IT

There are many similarities between the telephone company (Telco) and the IT department. Consider the similarities in the table below:

<b>The Telco</b>	<b>The IT Department</b>
Telecommunications Infrastructure	Computing Infrastructure
Deliver Primary Services ♦ Local phone service ♦ Long distance	Deliver Primary Services ♦ Business Applications
Deliver Ancillary Services ♦ Call Waiting ♦ Voice Mail ♦ Etc.	Deliver Ancillary Services ♦ Training ♦ Print Services ♦ Etc.
Provide Support Services ♦ 411 - Information ♦ 0 - Operator	Provide Support Services ♦ Help Desk ♦ Move, Add, Change
Goals ♦ High availability of services ♦ Responsive support ♦ Optimized cost of operations ♦ Fees for services rendered	Goals ♦ High availability of services ♦ Responsive support ♦ Optimized cost of operations ♦ Charge-back for services

We've all experienced using the telephone system to make phone calls across a telecommunications infrastructure which spans cities, countries and the globe. The services are reliable, efficient and effective.

But what impact would the following things have on the reliability of the telephone services, as we know them? What if ...

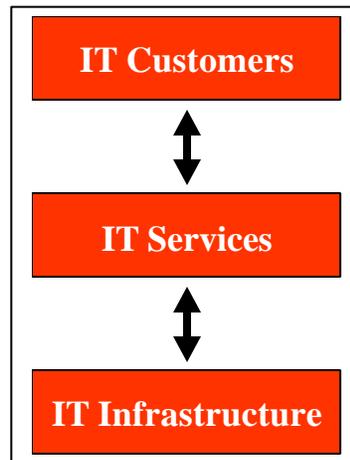
- New services were introduced by one group without consulting with, or informing, the people responsible for managing the infrastructure as well as those who provide support services
- Changes were made to the infrastructure without a risk assessment or thorough testing prior to changes being implemented
- The operators who provide support services had no access to information about the services the customers were entitled to, nor the customer's service history
- Rolling out a new service, like call waiting, meant that a technician had to physically visit each home or office where the service was required
- The people supporting the infrastructure had little or no information or diagrams about the structure and specifics of the infrastructure and its components

- There was no plan or capability to recover the infrastructure or restore services in the event of disaster or human error
- There was no proactive monitoring of the infrastructure to predict or identify errors or problems before they impacted the primary services
- There were no standards in place for the components of the infrastructure
- There were multiple phone numbers to call, or specific individuals you had to contact, to get support on primary services
- There was no means to measure the usage of specific services and relate them by specific customers
- The customers had no appreciation of the cost of services and just got one big bill at the end of the year
- There was no way to ensure that your communications were secure or that the infrastructure was not being tampered with maliciously
- There was no ability to predict and manage the workload or volume of usage of the services and the likely impact on the infrastructure

Obviously if this were the norm, we wouldn't have reliable telephone service such as we do today. The reasons behind the high quality of telephone services are that strong processes and systems exist to ensure effective delivery of primary and ancillary services. This is based upon an understanding of the overall process for service delivery and the dependency on effective management of the underlying infrastructure in order to deliver services.

Unfortunately, the types of things listed above are often the norm for many IT departments. The IT staff is a collection of hardworking and intelligent people, so why do the types of things listed above happen? Typically it is the result of a computing environment of vast complexity that has evolved quickly and continues to experience rapid change.

Unlike the Telco, where the primary services don't change significantly, the IT department is faced with regular changes to the main business applications they deliver. Whether it be changes to existing applications or the deployment of new applications. The constant pressure to keep pace with the demands of the business, and continuously deploy new or better applications and services, puts a tremendous strain on the IT operation. Consequently, you find each area of IT diligently trying to deliver the best services they can, but usually there is no end-to-end view of how all the services, infrastructure and management processes need to be linked together in order to deliver Telco-like reliability and efficiency.



## Creating the IT Service Delivery Utility

If IT wants to achieve dial-tone availability and dial-zero responsiveness and efficiency, it must find the means to tie together its people, processes and technology. This is not to suggest that IT should spend millions of dollars to achieve 100 percent availability levels if the needs of the business can be satisfied at a level of 95 percent. The level of service that IT provides must be consistent with the goals of the business, which includes the funding that is available for IT spending.

Nevertheless, all IT departments should be interested in improving service levels to increase customer satisfaction. The concept of the IT Service Delivery Utility is based upon delivering service at optimal costs for your business. Creating the IT Service Delivery Utility involves a number of things:

### ***1. Adopt a service delivery philosophy and culture***

IT senior management must adopt the philosophy that they are a service delivery business within the core business. This means a shift from managing technology to managing, or better yet partnering with, IT customers. The understanding of IT service delivery processes and emphasis on customer satisfaction must permeate throughout the IT department. This will likely require training on relationship management and the adoption of service level agreements that both align IT services to business goals and drive IT service delivery processes.

### ***2. Establish an enterprise view***

Adopting a service delivery culture means that projects and groups within the IT department that operate as silos will have to give way to operations with an end-to-end perspective or enterprise view. Many people in IT organizations tend to view their responsibilities along lines of technology. There are mainframe views, desktop views, network views and midrange system views. Delivery of primary services such as Enterprise Resource Planning (ERP) applications requires an end-to-end approach with respect to the processes that will be required to effectively support these business-critical applications. Establishing an enterprise view means that all IT services, processes and tools are examined and delivered with the requirements of all IT's business customers in mind.

**3. *Model the critical path of service delivery***

To become a service delivery organization, the IT department must understand their critical path for service delivery. This means identifying the core functions of IT that are required to deliver service to the business. All underlying functions, processes and tools must support the core service delivery process. Understanding the overall model of IT service delivery provides a reference point for IT to ensure that its processes are aligned with the business. With an established service delivery model, the IT department can then validate its projects, processes and tools to ensure that they are linked to the core functions required to deliver service to business users.

**4. *Identify and agree on the hand-offs in service delivery***

With the adoption of an enterprise view to service delivery, it will become apparent that a much more collaborative effort is required by IT staff to ensure that services can be delivered at levels which satisfy business customers. Processes for both service delivery and the management of the computing infrastructure will cross IT organizational boundaries and perceived areas of responsibility. Consequently, it is imperative to establish hand-off agreements amongst the different IT groups in order to ensure proficient service delivery. Internal communication breakdowns amongst IT groups can lead to dissatisfied customers who bear the brunt of an uncoordinated effort. Establishing agreed to and documented guidelines, standards and turn-around times between groups helps IT to operate more effectively and to accurately set customer expectations for service delivery.

**5. *Understand the dependency that service delivery has on infrastructure management processes***

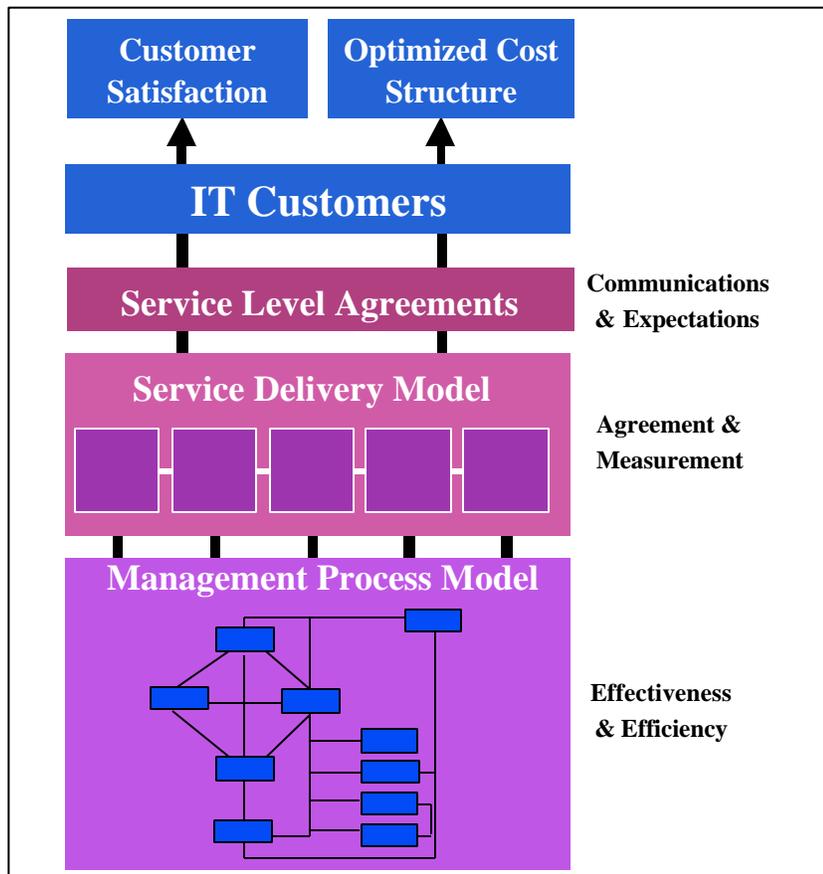
Proficient service delivery will mean more than great applications and a responsive help desk. The processes for managing the infrastructure are critical to ensure that effective service delivery can occur. Proactively being able to detect and respond to events, prior to them impacting primary services, is crucial to ensuring uninterrupted services, which in turn leads to satisfied IT customers. Processes must exist to ensure the security and availability of the infrastructure.

**6. Establish a system of measurement**

To enable a relationship with business users, which is based upon delivering service to specific levels, requires a system of measurement. Measurement from both the perspective of what is important to the customer (external measures) as well as what is important to IT (internal measures). Measurements must enable the quantification of results and more importantly they must enable continuous improvement by helping IT identify where improvements in service can be made. A system to measure the quality and cost of services is founded in the ability to measure the time and volume of service delivery and infrastructure management processes.

**7. Communicate and continuously improve**

Communication and continuous improvement must be part of your service delivery culture and processes. Regular forums with business users should occur to review services, service levels, and the changing requirements of the business. Being able to present the business with a formal process of service delivery shows a commitment to professionalism and quality of service. Being able to show business users how the services that IT provides are enabling them to meet their business goals is an effective way to market and establish the value of IT to the business. Working with the IT customers to fine tune service delivery and improve service levels will help to ensure satisfied customers.



## The Role of Enterprise Management in IT Service Delivery

The Telco recognizes the importance of managing its infrastructure, for without it, service delivery cannot occur. Proficient IT service delivery requires effective management of the computing infrastructure and efficient processes for support. The role of enterprise management is to ensure that processes are in place to provide responsive, quality support and proactive management of the computing environment so that the required levels of service and availability can be achieved.

For the purpose of example, let us say that the critical path of IT service delivery is:

- Plan with the business
- Develop or acquire technology solutions for the business
- Implement solutions for the business
- Support the solutions
- Control the infrastructure

These five basic functions will have numerous supporting functions or processes that are required in order to ensure that service delivery is performed at a level that is consistent with the requirements of the business. Many of these supporting processes collectively form the discipline of enterprise management. These enterprise management processes must be in place in order to ensure that the critical path for IT service delivery is successful. For example:

- Plan with the business  
This will likely involve processes for establishing and maintaining service level agreements while gathering the requirements for future applications and services in order to enable the business to remain competitive. Additionally, capacity planning will be required to ensure that the infrastructure will be able to keep pace with the demands expected by the business.
- Develop or acquire technology solutions for the business  
This will likely involve processes for change and configuration management to ensure that there is a structured, project-based approach for introducing new solutions, and that they conform to established standards that help to reduce the complexity of the computing environment and increase availability levels. Additionally, an asset management process will be required to govern the procurement and lifecycle of technology assets.

- **Implement solutions for the business**  
This will likely involve processes for change management that coordinate the roll-out of technology, processes and procedures, and ensure that they do not conflict with or adversely affect the existing solutions. To expedite changes a process will likely be required for inventory management to confirm existing system configurations and numbers of systems, as well as an electronic software distribution process to enable fast deployment of solutions to hundreds or thousands of users.
- **Support the solutions**  
This will likely involve processes for incident and problem management so that IT can react quickly and effectively to customer problems and/or requests for changes. This may be coupled with the inventory management system to help the support staff understand user configurations. Additionally, remote control capabilities may be required so that support staff can take control of PC desktops to help users solve problems.
- **Control the infrastructure**  
This will likely involve processes for availability and event management so that proactive monitoring of the critical elements of the infrastructure can occur and problems can be detected and corrected before they impact services. Additionally, security management processes will be required to protect against malicious attacks and to control access to confidential information. Workload and performance management may be required to ensure applications are meeting expectations for responsiveness, for balancing processing work loads, and to ensure timely and accurate completion of batch jobs. Storage management processes will be required to ensure the availability of data to meet the service level requirements of the business users.

To quantify return on investment, it is important that enterprise management processes and tools are linked back to the critical path of IT service delivery. IT should be able to quantify its investments in enterprise management by how they improve service delivery or help IT meet service level commitments at optimal costs to the business. The enterprise management processes and tools should provide the information necessary to effectively measure IT service delivery so that results can be quantified and continuous improvement can occur.

## Summary

The combination of well defined processes for service delivery and enterprise management will help the IT department to deliver Telco-like availability, quality and reliability of services. Creating or refining IT into a Service Delivery Utility will require a commitment from management to take a strategic approach to managing IT as a customer service business. The benefits of adopting this approach are that the business will have an IT department where investments can be linked to achieving business goals. The IT department will be viewed as a valued contributor to the business and proficient deliverer of quality services.

## About Enhance Systems Inc.

Enhance Systems is an innovative company that helps IT departments succeed in improving service levels. The company's OmegaVision, is a proven, fast and guaranteed method of implementing successful enterprise and service level management solutions. Enhance Systems services its international customer base from offices in Calgary, Toronto, and Minneapolis.