

Thought Leadership



Connecting to Mobilize – leveraging the power of Web services

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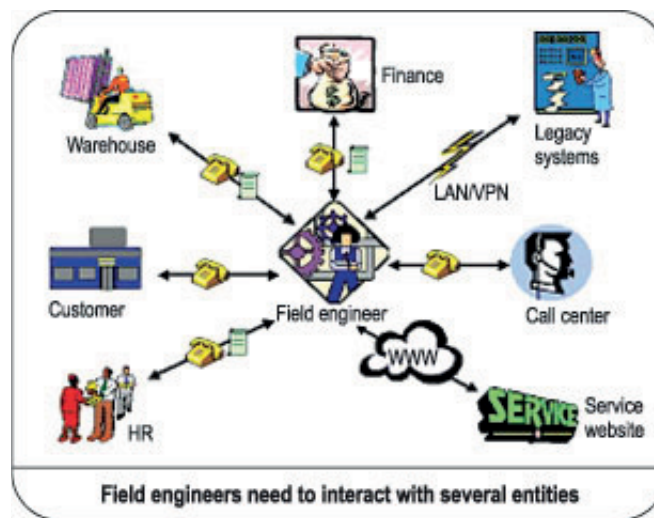
The over 7 million strong pool of field technicians and engineers represents a major chunk of the mobile workforce in the US. They play a crucial role in today's competitive scenario where customer base retention and expansion are critical. On one hand their effectiveness in delivering timely and high quality service helps organizations retain current customer base and enhance brand loyalty and on the other, being on the forefront of customer interactions, they are a valuable source for capturing leads that could culminate in additional business. In addition, a well-executed customer service delivery process reduces costs in the system, boosting profits and increasing competitiveness for both the customer and the service organization.

Let's consider the case of a company with 200 field engineers costing \$125,000 each. This would work out to \$25 million per year. Every 1% of productivity improvement can contribute \$0.25 million per year to the bottom line through additional billing or cost avoidance. This is in addition to increased revenue from improved customer satisfaction.

People with adequate skills, positioned appropriately in the service network, can help an organization achieve service excellence. However, the field executives need to be empowered by timely and adequate resources, to achieve this.

The core business processes and the ground realities within which field service personnel operate present some challenges:

- **Information dependency:** All critical activities of field service personnel have high information dependency. From the most basic activity like locating and allocating the right engineer to the more complex ones like locating a required spare part in a vast service organization. Correct assessment of the cost of delivering any service is essential to building a pricing structure for any new product introduction. This calls for vigorous collection and analysis of historical data.
- **Geographical spread:** Often, the service engineers need to be physically present at the points of service. These could be spread globally and sometimes even in areas where reliable telephone land links are not available. For example in an industry like the earth moving machinery engineers are often deployed in remote locations. Organizing training programs for a geographically spread workforce also poses its own challenges.
- **Mobility:** Field engineers are usually on the move at remote distances from corporate networks and providing them access to information at the right time is critical. An organization would also need to monitor personnel location and availability status on a real time basis in order to make optimal allocation decisions.



Case Study

The helpdesk of a leading office automation and network solutions provider receives call requests for a whole range of products from EPABX to LAN/WAN issues.

A call from a customer who was facing network problems was registered as “VPN not working”. The helpdesk operator had to locate all the engineers likely to be present in the vicinity of the customer. This was followed by the allocation decision that called for a number of phone calls between the call center, the engineers and the service manager. Finally an engineer was allocated. After reaching the site the engineer realized that the problem was in the service provider’s network. This required the intervention of his technical support team. His repeated calls to this team located at Headquarters went unheeded as they had their own set of priorities. Consequently, the service organization and, more importantly, the customer lost a day’s productivity.

A better mechanism to capture requirements, locate a free resource, an allocation decision taken after assessing current network status, and a clear-cut and automated escalation of the issue, could have averted this loss.

Web services can meet both the information as well as the transaction centric needs

All concerned systems of an organization can be connected through the Web and relevant information made easily accessible for customers, warranty analysts, service engineers etc. This interoperability would greatly enhance the support system for field engineers regardless of their location. The organization, too, can leverage this to keep abreast of the status on the field, take immediate corrective actions where required and allocate engineers optimally.

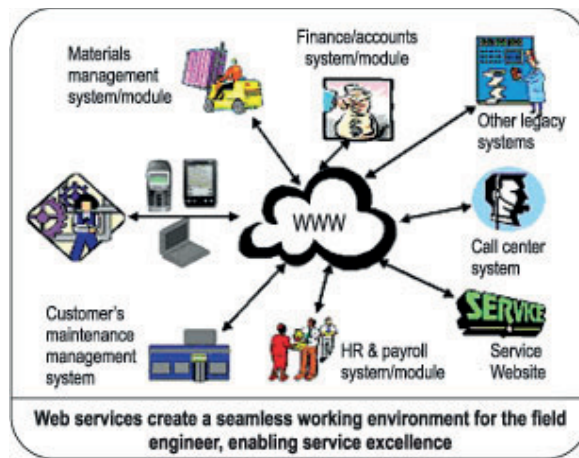
Business benefits through Web services

The unambiguous flow of information from customer to field service engineer and back due to the reduction in information intermediaries, translates into considerable business benefits. Some of the benefits of utilizing Web services are:

- Significant reduction in time and efforts spent in tracking engineers and allocating them to service a new requirement
- Improved match between service engineers’ skills and requirement at customer end
- Increased visibility to available inventory resulting in reduced outages and improved customer confidence
- Improved capability to enforce disciplined execution of the returns management process by increasing the visibility of returns inventory through the supply chain
- Availability of equipment service history on the fingertips to help quicker diagnosis and reduce repeat calls (currently as high as 20 to 30% in some industries)
- Online availability of service literature and drawings

Going the extra mile

In order to optimally leverage Web services for the field workforce, a key imperative is a solution that keeps them connected while on the go. In this context, wireless technology can be effectively used with the power of Web services. Engineers can login to a central server through mobiles and palm tops enabling them to access all relevant information and conduct critical transactions while on the move.



However, organizations opting for Wireless services need to be cautious. Since different technologies come with their own inherent characteristics, it is imperative to ensure that the solution deployed is device independent. There are two prime reasons for this. Firstly, while mobiles and palm tops play the role of ensuring connectivity on the move, current technology limitations put a cap on the level of bandwidth available. Second, Wireless networks are not available in all parts of the world. In such situations, Broadband access using laptops can be leveraged effectively.

Conclusion

Organizations can leverage Web Services in order to reduce costs, quicken deployment and improve execution of field service. This will also aid in improving brand image and capturing sales leads. In order to achieve this, the key imperatives are:

- Web-enable the whole process in order to provide knowledge and information access irrespective of location
- Add the dimension of mobility to enhance overall effectiveness
- Deploy decision support tools for resource scheduling
- Leverage account performance monitoring tools to monitor effectiveness and cost of service
- Install and optimally utilize Knowledge Management Infrastructure

About the Author

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