

Construction Firms Take a Lead Position on the LBS Roadmap

Industry-Wide LBS Adoption

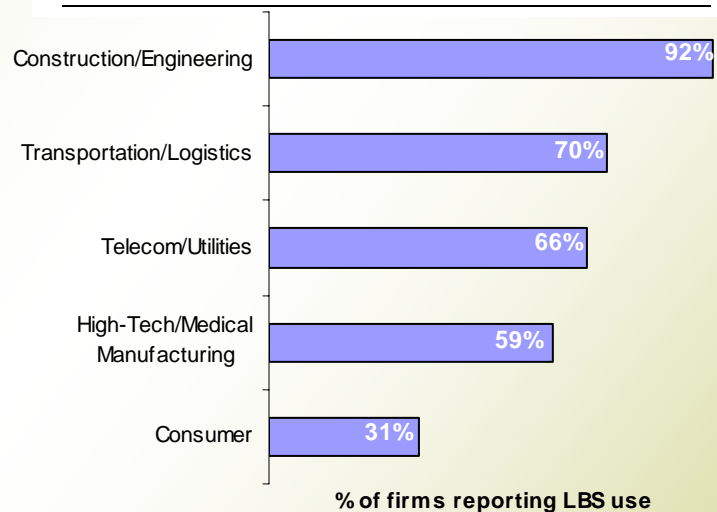
Aberdeen's latest study on [Location-Based Services](#) indicates that 63% of all service organizations are currently using location-specific data and systems in their field service operations. At the top of the adoption scale is the construction/engineering industry with nearly 92% of firms stating that they use some sort of LBS such as GPS, GIS or AVL in their field service operations.

Customer Sat Drives GPS Purchases

Location-based services are seeing a high degree of adoption across industries, primarily in response to current field service satisfaction levels. To elaborate, while 72% of firms in the construction/engineering sphere believe field service to be 'very' or 'extremely' important to their operations, not a single respondent claimed the same level of satisfaction. It is not surprising therefore that 86% of these firms are looking to upgrade their current technology infrastructure to enhance their customer response times and ultimately boost their service viability. As such, these industry segments lead the list of those that are currently leveraging some level of LBS in their field service operations. Other industry segments near the top of the pack are transportation/logistics and telecom/utilities.

For industries across the board, customer demand for better performance, and inefficient task scheduling and routing topped the list for drivers to LBS adoption. Increasing overall service costs, in the form of vehicle or labor costs, was also represented across industries as a driver but was most prevalent amongst telecom/utilities with 54% reporting rising costs (field worker + fleet-related) as a major reason for LBS adoption.

Figure 1: LBS Adoption across Industries



Source: AberdeenGroup, November 2006

Recommendations for Action

- √ Avoid the Killer B's – Breadcrumbs and Big Brother
- √ Measure and then Share the Value of Location Intelligence
- √ Amplify the LBS Value with Senior Visibility

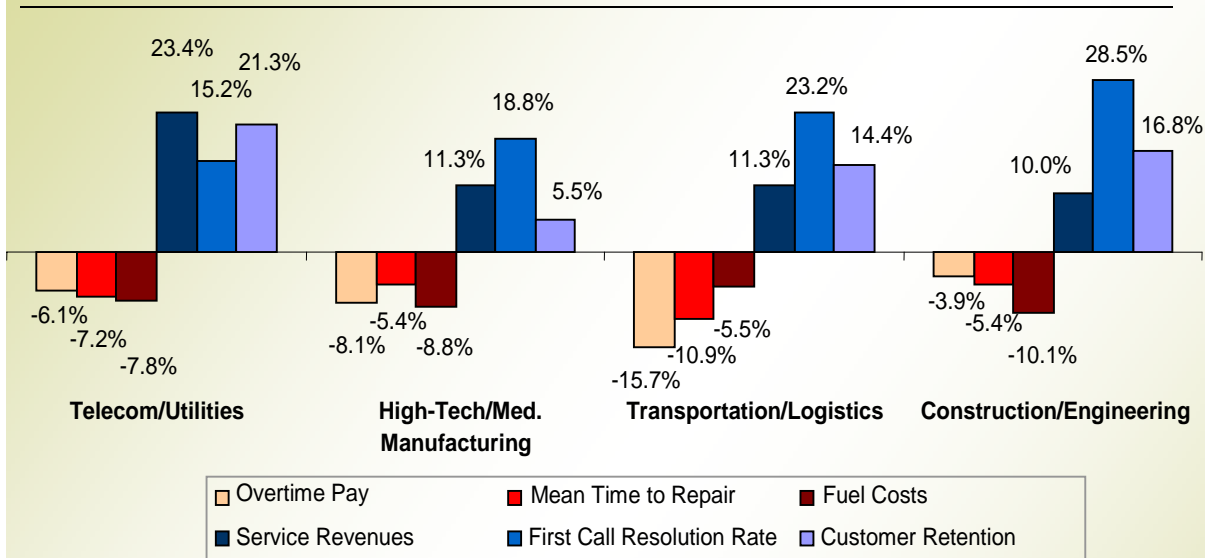
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Across the Board – Industries Headed in the Right Direction

Given the customer satisfaction, routing, and cost drivers that firms are facing, most of the top metrics identified by companies to measure their field service performance generally fall in the categories identified by these drivers. Enhancements in these metrics can be seen not only in terms of absolute improvements from LBS adoption (Figure 2) but also in comparisons between the performance of firms that currently use LBS against those that do not use LBS (Table 1).

Figure 2: LBS Enhancements across Industries



Source: AberdeenGroup, November 2006

In terms of absolute enhancements, the industries responding to Aberdeen’s survey reveal varying degrees of success in affecting key metrics. Across the board, industries have seen a greater than 15% increase in first call resolution rates with construction and engineering topping off at nearly 30%. The industries also report a greater than 5% decrease in mean repair times, which can be extremely vital to mission critical industries such as medical manufacturing. In addressing service related costs, LBS has enabled companies in the transportation/logistics field to slash nearly 16% in their overtime pay which can be attributed to accurate validation and verification of hours worked/spent on customer sites due to LBS technology.

Table 1: Productivity Benefits from LBS

Industry	Average Response for Daily Work Orders Per Technicians		Improvement
	LBS Users	LBS Non-Users	
Construction/Engineering	3.3	2.5	32% ▲
Consumer	4.4	3.8	16% ▲
High-Tech/Medical Manufacturing	3.2	2.7	37% ▲
Telecom/Utilities	4.9	4.2	17% ▲

Industry	Average Response for Daily Work Orders Per Technicians		Improvement
	LBS Users	LBS Non-Users	
Transportation/Logistics	5.1	4.1	24% ▲

Source: AberdeenGroup, November 2006

Enhanced location intelligence from LBS solutions can supercharge the capabilities of scheduling and routing tools – leading to lower transit and travel times and hence greater worker productivity. Firms that leverage LBS tend to see marked improvements in the number of service orders that they can complete on a daily basis. Case in point, convenience store operator **Sheetz** uses about 60 field technicians to maintain food service equipment, gasoline dispensers, HVAC, and other equipment at its 285 stores across five states, and was losing track of parts and work order information amidst ad hoc phone calls and mismanaged paperwork. The company set about eliminating paper and manual processes from its field service operations and deployed a mobile solution that allows technicians to electronically close service calls and tracks technicians' locations using global positioning system (GPS) receivers in the service vehicles. As a result of its mobile service operation, Sheetz improved the accuracy of work order records, improved response times, driven process adherence by ensuring mandatory data is collected before service orders can be closed, and increased productivity through reports that chronicle the effectiveness of each technician.

Recommendations to Unleash the Full Force of LBS

Irrespective of industry, the following are some of the key steps that can be taken by service organizations to position themselves to take full advantage of the intelligence that Location-Based Services provide.

'Breadcrumbing' and 'Big Brother' present a Short cut to Underperformance

More than half the firms in most industries (73% for construction/engineering, 71% for transportation/logistics, 57% for telecom/utilities) indicate that they use the 'big brother' approach with LBS so as to monitor underperforming and non-compliant technicians. While improving employee compliance is a potential byproduct of LBS-enabled field service systems, it is only a component of the abilities that location intelligence can provide. Leveraging location data as actionable input for dispatching, scheduling, and routing is how true operational and financial performance gains can be had.

Supercharge the Location Intelligence – Measure and Share the Value

Location intelligence can be of great value if shared throughout the entire organization. Not only can it help with customer satisfaction, but it can also enable other value chain units such as marketing, sales and product engineering to tweak their offerings to better match customer needs. There is great potential for firms across industries to tap these opportunities, as less than a third of respondents in nearly all industries respond to actively sharing point-of-service data with value chain counterparts. In fact, 40% of firms in the transportation/logistics field state that little or no service-related data is captured and shared with value chain counterparts.

Resource Roadblock Removers – Executive Champions

More than half the respondents across well-represented industries state that the lack of internal IT resources was a major challenge preventing LBS adoption. A senior-level executive with visibility into the benefits and returns of LBS can have vital influence on decision makers who are in charge of IT and other purchasing and budgeting decisions. While most industries reported having director-level participation in terms of cost-cutting and productivity targets, almost none of the industries in the survey reported having more than a third of respondents with VP or C-level oversight over service profit and loss.

Parts management presents a large LBS opportunity

Industry leaders are increasingly looking to coordinate the planning, provisioning, and costing of service parts and field service labor, as they aim to reduce parts-related delays and costs and enhance customer satisfaction and profitability. In the Transportation and Consumer sectors 58% and 56% of respondents respectively stated that integrating parts planning is a key strategy to improving their field service effectiveness. As such, there are also notable trends towards the adoption of RFID technology for parts management within these industries.

Related Research

[*Location. Location. Location. Does it Matter in Field Service;*](#) October 2006

[*Remote Product Service Update;*](#) November 2006

Upcoming Research

[*Mobile Field Service Update;*](#) January 2007

[*Field Service Fleet Management;*](#) March 2007

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