Location-based services: Where’s Waldo?

Location-based services

It’s 10 p.m. on a school night—do you know where your teenager is? If you subscribed to one of the family-oriented “people finder” services that carriers are offering today, combining location-based technology with mobility, you could pinpoint your child through a signal emitted by his or her cell phone. For anxious parents, location-based services (LBS) can mean peace of mind; for the enterprise, LBS can mean being able to track a fleet of services personnel to improve efficiency and productivity, or the ability to reach out to potential customers who are in the area—increasing the chance that they will patronize the business.

“North America is leading the market right now for location-based services that enable enterprises to improve their productivity,” observed Joe Dyoub, global solution manager, network and service provider organization at HP. “So it’s not just about a service to provide location in and of itself, but tying location together with other services, such as fleet management, to improve productivity.”

But demand is growing in the consumer world too. “If you’re the parent of a teenager, knowing where your son or daughter is as soon as they miss curfew is of very high interest,” added Deborah McPheter, LBS business development manager for North America at HP.

Location-based services first entered market consciousness during the telecommunications boom of the late 1990s, being touted as the “next big thing” for wireless service providers. While reality has taken some time to catch up with these initial high expectations, today LBS is taking off as the business case, consumer demand, and technology have evolved to provide significant and measurable value to wireless consumers.

Accuracy is the key to stickiness

“It’s been validated in North America that there is a strong correlation between accuracy and the value of the service,” noted McPheter. “CDMA carriers in North America use high-accuracy location technology as their mechanism to meet their 911 mandates. Utilization is high on the business side for tracking people, such as service crews, as well as company assets; in the consumer world, one of the more highly valued services is people finder—and we’re seeing that location is a natural add-on to a family plan.”

Such services are possible today because service providers now have the ability to deploy position-determination systems with very high accuracy to complement their existing systems. Many carriers are choosing hybrid solutions that enable them to take advantage of multiple position-determination technologies and utilize whichever is most appropriate for a particular location-based application. In addition to new positioning technology for LBS, user devices and interfaces
have advanced, making services more visually rich and are easier to use. Operators looking to deploy location-based services now have a vehicle from which they can deliver a greatly enhanced end-user experience.

But accuracy is first and foremost. “If you don’t provide high accuracy—and this is backed up by lots of studies—these services won’t stick,” Dyoub emphasized. “Subscribers won’t be happy. High accuracy has been around for a while in CDMA markets because of the 911 mandates, but it’s just recently that the commercial services have started taking advantage of these high-accuracy systems.

“We’re also seeing lots of interest in standalone applications that have added location—so if, for example, you’re in a dating club, you can enhance that service by being alerted when someone who matches your profile and interests is, say ‘X’ number of feet away from you. So these services become more relevant based on enhanced accuracy.”

HP end-to-end solutions support worldwide LBS installations

The HP LBS solution portfolio combines commercial services, emergency services, position-determination infrastructure, location-enabling infrastructure, OpenCall carrier-grade platforms, and HP Services.

HP partners with market-leading location application providers Autodesk Location Services, Cambridge Positioning Systems, Global Locate, Microsoft, and Openwave, as well as Networks in Motion and Teydo to deliver a comprehensive offering that addresses both the emergency and commercial services marketplace. HP also maintains an experienced consulting organization that can help carriers tailor the LBS offering to address their specific market.

The solution is integrated with the HP Service Delivery Platform (SDP) blueprint, enabling operators to more easily combine LBS with other service building blocks, such as voice and presence, to create more sophisticated end-user services.

“The SDP blueprint greatly enhances the location-based services offering from HP. With SDP, we can easily tie together location with other capabilities, such as VoiceXML,” noted Dyoub. “So if, for example, you want to send a voice alert to a driver who’s headed the wrong way—and you want to save the time and cost of having an operator call him—just have the computer dial him to provide a message saying ‘Check your map—you’re going the wrong way.’ That’s the sort of value-add we can provide in addition to location.”

Making money with LBS

McPheter pointed out that the HP LBS solution set has demonstrated market leadership while winning several awards; these accomplishments include:

• Carrier LBS Solution of the Year Award—Frost & Sullivan, 2005
• Mobile Business Solution of the Year—Frost & Sullivan 2004
• Innovative Solutions Award for e911—CDG 2002
• The first solution to meet FCC mandate for Phase 2 e911—2002
• The first solution to integrate positioning entity and location gateway on one platform—2002

“The significance of the awards is that they validate what HP has been saying over the past two years,” she said. “We’re the one company that’s really promoting the end-to-end story of how to make money with LBS. It’s all about delivering profitable solutions with a fast ROI—HP can do the technology, but the major value-add to carriers is bringing all these various entities together within a proven business model.”

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