



Locational Awareness: Geospatial Trends in the Mobile Workforce

Robert P. Laudati
Trimble Navigation Ltd.
United States

Abstract:

Organizations throughout the world have successfully leverage geospatial technology to accurately document their field assets, resulting in a measurable return on investment for using location in business decision making. Today, organizations are pushing that technology to the field and “geo-enabling” the mobile workforce. The forecasts are impressive; the mobile worker population worldwide is projected to grow beyond 1 billion in 2011 representing over 30% of the global workforce. Mobile communication technologies are expected to increase field workforce efficiency and provide an unprecedented level of responsiveness from the field. In fact, Gartner has recently included mobile applications as one of the top 10 technologies in 2010. This evolution is driving several key trends in the geospatial industry:

- Geospatial standards such as OGC and IT standards including service-oriented architecture (SOA) with web services integration are changing the paradigm of highly-complex GIS. As a result, geospatial technology can be more tightly integrated within a company’s broader IT service delivery architecture.
- The mobile workforce, seeking to leverage asset information in the field, is creating an interesting side effect; a feedback loop where more sophisticated data collection must occur to support the mobile applications, or what could be termed *data development*.
- As the user base expands and mobile GIS applications become mainstream, leveraging easily deployable technology is becoming critical for a large workforce that does not have GIS experience and little opportunity to be trained.

These trends will drive increased differentiation in hardware and software offerings, not only in the data collection, development and use continuum, but also targeted to specific industries. The geospatial industry must support this differentiation with an increased understanding of market segments, both by geography and culture as well as specific vertical markets, in order to provide purpose built applications that can be integrated seamlessly, deployed easily, and used by an enterprise workforce with a wide range of skills.