

Award Description

The Frost & Sullivan Award for Technology Leadership is bestowed each year upon the company that has demonstrated excellence in technology leadership within their industry. The recipient company has demonstrated technology leadership by excelling in all stages of the technology life cycle—incubation, adaptation, take-up and maturity—to ensure a continuous flow of improvements. By innovating leading-edge concepts the company has pioneered client applications.

Research Methodology

To choose the recipient of this Award, the analyst team tracks all emerging technologies and ongoing research and development projects within the industry. This process includes interviews with all the market participants and extensive secondary and technology research. The technologies and research projects are then compared according to customer base demands. Also considered are elements such as feasibility of product launch, likelihood of customer acceptance and acceptance rates, and estimated time to market. Competitors are then compared and ranked for relative position. The company chosen to receive the Award received the number one industry ranking.

Measurement Criteria

In addition to the methodology described above, there are specific criteria used in determining the final ranking of competitors in this industry. The recipient of this Award has excelled based on one or more of the following criteria:

- Significance of the technology in the industry
- Number of competitors having similar industry technology (competitive factor)
- The technology refinement process meets changing end-user needs (addresses research and development efforts by vendors)
- Value-added technology and services to the customers
- Adoption rate by each of the industry participants (denotes responsiveness of the vendors)
- New product innovation
- Time to market

**2005 Frost & Sullivan Award for Technology Leadership
Award Recipient – Cisco Systems**

Frost & Sullivan presents its 2005 Technology Leadership Award in the Wireless Networking Solutions in the First Responder IT and Telecom markets to Cisco Systems. This Award comes in recognition of Cisco’s Metropolitan Mobile Network solution that provides broadband wireless access to the first responder (police, fire & EMS) agencies.

This solution is based on a unified, cost effective IP network foundation, thus placing Cisco in a strategic position to address the increasing demand from the first responder agencies for real-time, mobile access to mission-critical data on field, which can go a long way in improving responsiveness of emergency personnel while responding to emergencies.

Although commercial wireless technologies offer excellent bandwidths and value added services, public safety agencies are reluctant to adopt these services, as they prefer to own the networks for security reasons and due to the possibility of potential interference with other commercial users. There is an increasing trend in the market towards agencies building their own private Wi-Fi networks to extend the reach of

LAN networks to the field personnel. This represents a large market potential for network solution providers.

With the introduction of this solution in June 2004, Cisco Systems is uniquely positioned in the first responder IT & telecom markets to tap the growing market potential. Cisco collaborates with some of the leading system integrators, hardware vendors, and other network solution providers to provide agencies with an end-to-end wireless networking solution.

Technology

The Metropolitan Mobile Network solution is a highly secure and scalable, standards-based solution that makes use of advanced mobile routers, access points and network interface cards from Cisco Systems.

Cisco 3200 Series wireless and mobile routers are used along with integrated wireless mobile interface card, to create a network comprised of laptops, PDAs, video surveillance cameras and other devices that maintain connectivity even as the vehicle moves between cellular and Wi-Fi coverage areas and across the community. The solution offers an integrated IEEE 802.11 capabilities, and hence can also be deployed in fixed locations such as on light poles and on roof tops as a ruggedized outdoor wireless router to help provide wireless coverage across the city. The Cisco Aironet 1400 Series Outdoor Wireless Bridge provides long-range IEEE 802.11a connectivity and the Cisco Aironet 1300 Series Outdoor AP and Wireless Bridge provides IEEE 802.11b/g connectivity and access at medium ranges.

Road Ahead

The growing trend towards build-out of private wireless networks is a major trend in the first responder telecom markets. Agencies' strong belief in owning the network, due to security concerns and the desire to retain control over the network to achieve mission-critical quality is the driving factor for statewide rollouts of private wireless networks. Availability of the licensed 4.9 GHz band, exclusively dedicated for public safety agencies' use is again a major driver for building out private networks.

Agencies can use this band to implement wireless networks with advanced wireless data services for the transmission of mission critical information such as streaming video, geographic mapping data, images of missing people, GPS tracking, fingerprint verification, and others. Frost & Sullivan expects wireless networking solutions to sustain increased spending from the agencies in the years to come.

Cisco is strongly positioned to tap this market potential, as the Metropolitan Mobile Network solution provides a flexible architecture to support existing wireless technologies such as IEEE 802.11a/b/g, cellular and satellite and emerging wireless technologies such as licensed 4.9GHz for public safety.

Also, the recent focus on increased interoperability and Homeland Security make availability of the 700 MHz spectrum to public safety agencies nationwide even more critical. Availability of this spectrum would help agencies implement emerging advanced wireless wide-band and broadband technologies, adapted for mission critical public safety applications. This again represents a huge market potential for wireless network solution vendors.

Conclusion

Public safety/first responder agencies' spending on telecom/network equipment is expected to reach \$2.83 billion by the year 2007, growing at an impressive average growth rate of 13.9 percent. This growth can be attributed to on-going spending on interoperable solutions (patch/gateway devices to connect dissimilar radio technologies) to address the challenge of wireless interoperability, spending on equipment upgrades used by PSAP (public safety answering points) to comply to E911 requirements, agencies build-out of private wireless information networks using advanced wireless technologies such as Wi-Fi and wireless mesh networks.

Cisco Systems, with the introduction of this solution has shown commendable commitment to the public sector market. Cisco remains the undisputed leader in wireless networking by offering a wide range of product offerings encompassing Security & VPN, Switching, and Routing, IP Communications/Voice solutions, Video and others. Cisco's technology leadership in the wireless networking solutions market has been clearly acknowledged & established during the primary interviews undertaken by Frost & Sullivan with state CIOs, technology directors, and leading service providers in the state and local first responder IT telecom markets. The acknowledgement of key market participants and the agency officials stands as a testament to Cisco's commitment to the public safety/first responder IT market in particular and governmental vertical in general. Frost & Sullivan recognizes the same, and bestows its 2005 Technology Leadership Award to Cisco Systems.