Unified Communication, Collaboration and Mobility drive Headset adoption
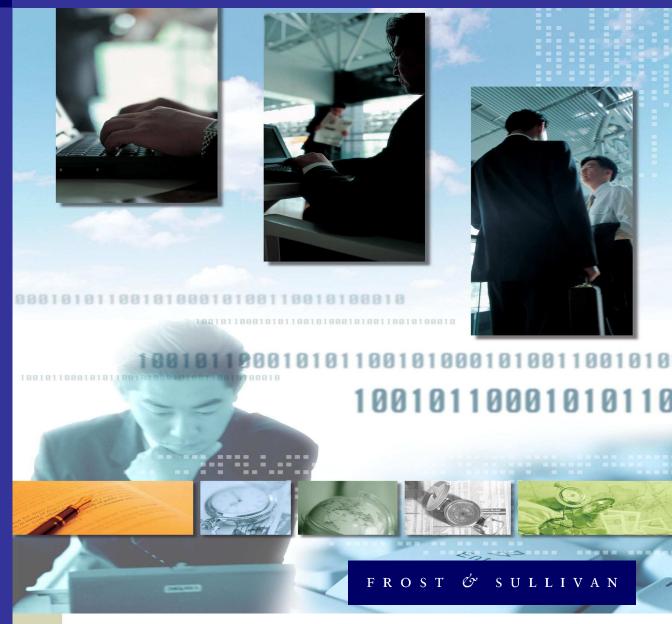
FROST & SULLIVAN

Unified Communications Market Overview and Key Trends

Definition

"*An amazing invention, but who would ever want to use one?*" – Rutherford B. Hayes (19th President of the United States of America (1877-1881) said on the invention of the telephone. The telephone has evolved considerably over the years. Communication has undergone a metamorphosis, which ranged from time-division multiplexing (TDM) to the convergence of voice and data (Internet protocol (IP) telephony), video conferencing, and unified communications (UC).

UC entails unifying the different communication applications such as voice, e-mail, instant messaging (IM), and conferencing and collaboration to deliver productivity gains for users, better team collaboration, and increased agility for enterprises.

The ultimate aim of UC is to embed communications into business processes to deliver quicker and better decision making, enhance collaboration across geographically diverse teams, and improve overall efficiency in the business process to make the enterprise more agile and competitive. In order to achieve this, multiple communication applications that operate in complete silos need to be integrated with one another and with business applications.

Market Overview

Business dynamics have changed considerably over the years. UC has become an important element for many businesses. *Mohan Sawhney*, McCormick Tribune Professor of Technology at the Kellogg School of Management in Northwestern University, commented,

- "Global firms will look like geographically differentiated network of capabilities and resources, instead of geographical subsidiaries in the traditional multinational model.
- The firm as a whole will rely more on partners for non-core activities and resources – so, the core will shrink and the periphery will expand."
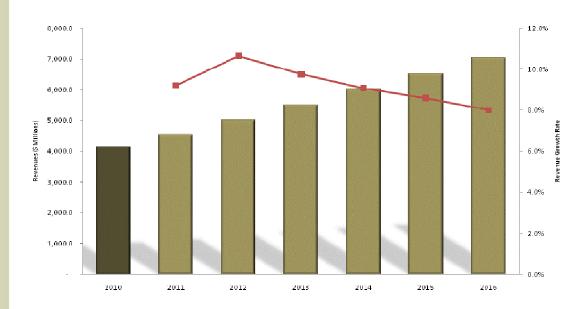
The UC market has been a significant entity in the enterprise communications industry since mid-2006. The market witnessed growth and increased adoption in 2010; however, many of the UC deals were for stand-alone applications such as collaboration, mobility, and IM. Chief Information Officers (CIO) have begun to appreciate the benefits of UC and value of integrating multiple communication applications.

The focus on UC has been increasing for over seven years. During this period, applications have evolved, and most enterprises have deployed the IP infrastructure necessary to support real-time UC. Currently as the infrastructure is in place, businesses can evaluate the best ways to implement UC to increase productivity, reduce costs, and improve customer satisfaction. Vendors are delivering premise-based solutions for UC. Other service providers, especially telecom operators, are offering managed UC services, which simplify the job of deploying UC. UC can have a tremendous impact on a business, and understanding the value of the investment as well as the recurring costs and benefits is vital.

UC relies heavily on the integration of both existing and new applications. For example, like the Web site, a customer can send an order, and the company responds with a link to track

the shipping. The customer asks a question, and the representative sends an instant message that answers it. That type of integrated communication is very powerful. However, it not only requires the underlying processes and infrastructure to be integrated, but also scalable, reliable, and secure. Chart 1.1 shows the revenue forecasts for the Asia Pacific UC market from 2010 to 2016.

Chart 1.1
Unified Communications Market: Revenue Forecasts (Asia Pacific), 2010-2016

<div align="right">Note: All figures are rounded; the base year is 2010. Source: Frost & Sullivan</div>

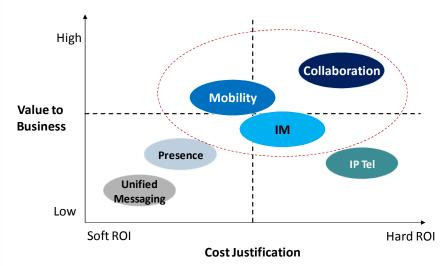Compound Annual Growth Rate (CAGR) 2010-2016: 9.2%

Key Trends

#1 Phased UC Adoption

CIOs have begun to appreciate the benefits of UC and value of integrating multiple communication applications. UC adoption is expected to occur in a phased manner. UC applications are adopted based on the current business needs for cost reduction. Enterprises are trying a few applications along with upgrading their telephony or messaging infrastructure. Conferencing and collaboration is the most significant UC application, followed by IM and mobility.

The complexity of UC deployments, interoperability issues with multiple applications and vendors involved and heterogeneous communications environment that exists within enterprises and system integrators with skills in both telephony and desktop communications will be the critical enablers for the success of UC. Chart 1.2 shows the value to business and cost justification in the Asia Pacific UC market in 2010.

Chart 1.2
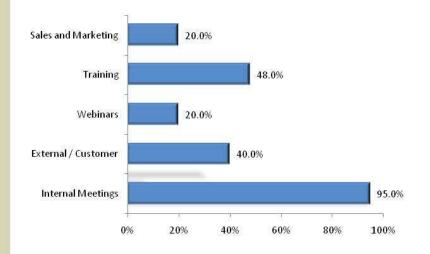Unified Communications Market: Value to Business and Cost Justification (Asia Pacific), 2010

#2 Growth in Collaborative Communication

Rise in Web conferencing adoption is expected in Asia Pacific. The Web conferencing market is expected to achieve an average annual growth rate of 22.6 percent between 2009 and 2016. In 2012, the market size is likely to have doubled from that in 2009. A key market driver is that internal meetings and trainings are conducted as Web conference sessions to reduce travel costs.

Chart 1.3 shows the Web conferencing application usage in the Asia Pacific UC market in 2010. A customer research was undertaken on Web conferencing application usage. It was found that Web conferencing applications are used highly for internal meetings.

Chart 1.3
Unified Communications Market: Web Conferencing Application Usage (Asia Pacific), 2010
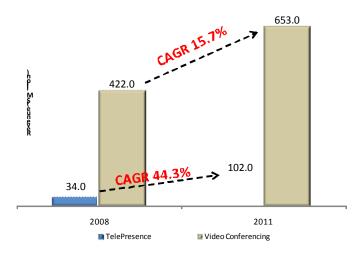
#3 Video Becoming Popular

Video is expected to become more pervasive, especially among multinational organizations. TelePresence adoption continues to be healthy in Asia Pacific, as awareness increases and companies begin to realize its high benefits and advantages. Immersive Communications Experience via 3D TelePresence is expected in the next few years. Seamless multimedia communications experience is likely to become popular – with the integration of text, voice, video, and social communications. Chart 1.4 shows the revenues of video conferencing and TelePresence in the UC market in Asia Pacific in 2008 and 2011.

Chart 1.4
Unified Communications Market: Revenues of Video Conferencing and TelePresence (Asia Pacific), 2008 and 2011

Note: All figures are rounded; the base year is 2010. Source: Frost & Sullivan

#4 Telephony Endpoint Evolution

Endpoint prices are being reduced; this is impacting the overall telephony revenues. A major trend in the IP telephony endpoint market is vendors' efforts to enhance the communication experience provided by the devices or that they offer. A meaningful way to do this is to enable businesses to have a significant level of customization in the telephony solutions that they offer. Additionally, granting enhanced applications and featured functions aimed at particular verticals or industries has proven to increase employees' productivity and are gaining traction. Chart 1.5 outlines the evolution of telephony endpoints in the Asia Pacific UC market in 2010.

Chart 1.5
Unified Communications Market: Evolution of Telephony Endpoints (Asia Pacific), 2010

| Analog | Digital | IP | Soft Phone | SIP Phone | Mobile Phone |

| Deskphone | Mobile phone | Smart phone | Netbook | Laptop | Desktop |

Source: Frost & Sullivan

#5 UC in the Cloud to Gain Adoption

As companies strive to preserve cash, and CIOs are unsure of the tangible benefits of UC, hosted and managed UC services are expected to gain traction in the market. Enterprises are expected to adopt hosted services to evaluate applications for select departments before they decide on adopting them across the enterprise. The OPEX-based pricing model will be extremely attractive to most enterprises; especially small- and medium-sized businesses (SMBs). Types of solutions that are emerging currently are the hybrid on-premise and on-demand models.

The different kinds of participants are as follows:
- Telecom service providers (Telecom operators)
- Large system integrators
- Conferencing service providers
- Software as a Service (SaaS) companies
- Vendors

The hosted and managed UC services market is expected to grow at a rate of 14.0 percent in 2010.

Increasing Focus on Collaboration

The year 2011 is expected to be watershed for the UC market, as the dynamics of the industry will now also be governed by the current economic scenario. Most enterprises are prioritizing their need to preserve cash. ICT budgets are affected, and CIOs are faced with the challenge of making the organization more agile, productive, and customer centric by delivering value through ICT investments and reducing costs.

Collaboration is expected to be the leading UC application. The current economic scenario has resulted in travel budget cuts and restrictions. This, coupled with the initiative to reduce carbon footprint and be "green", is expected to drive the need for conferencing and collaboration applications in 2011. Web-based collaboration and conferencing solutions, either as part of a UC system or even as a stand-alone solution, are expected to gain traction. Video conferencing solutions, from desktop video to boardroom video conferencing solutions and telepresence systems, are expected to witness significant growth.

Trends in Web Conferencing

The Web conferencing market in Asia Pacific is on a high-growth path. In the past, major drivers for the market were predominantly multinational enterprises collaborating with their Asian offices, or their suppliers and partners. Currently, however, Asian businesses, both large and small, are beginning to adopt Web conferencing, and perceptions are slowly changing in most markets. General meeting was the leading application on of Web conferencing in 2010, as most large enterprises opt to extend the internal usage to higher levels inside the organization. As a growing market, it is typical that companies start to deploy Web conferencing among a certain group of employees. In 2010, existing Web conferencing users extended the usage to sales and marketing, training, and investor relations.

Sales and marketing and training are the most promising applications for the growth of Web conferencing. Its usage is expected to witness robust growth in 2011, mainly due to the integration with other communication tools such as, UC and video conferencing. The uptake of webinar and webcasting is driving its growth. Hi-Tech, Banking and Financial Services (BFSI), and education are currently the key verticals; others are expected to adopt collaboration software in 2012 especially as its benefits become apparent among end users. Heightened market awareness and cultural acceptance of Web conferencing will spur growth in the other verticals.

Increasing Focus on Mobility

Mobility applications have been gaining more attention, as there has been an increase in the mobile workforce in Asia Pacific. Soft phone clients that can reside on mobile phones and link back to the enterprise PBX and enterprise directories are gaining traction in the market. Although mobility is a small contributor to the overall market revenue, it is a strong application which can help an enterprise adopt UC across the organization. Mobility applications are typically not rolled out across an enterprise; they are restricted to senior or sales executives or on-the-field workforce.
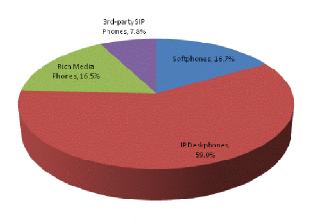
Softphone Adoption

The enterprise softphone market has experienced considerable growth in the recent years along with the implementation of voice over Internet protocol (VoIP). Although still an emerging market, softphones are increasingly recognized as the default extensions of IP desktop phones in corporate networks. The wider adoption of IP telephony, emergence of true UC applications, changing nature of work structure, and growing popularity of consumer-based voice and IM clients such as Skype, MSN, and Google Talk are some of the main factors that have increased the popularity of softphones. Travelling executives, road warriors, telecommuters, call centre agents, and other employees within an organization are benefitting from the flexibility and reliability granted by softphones.

Chart 1.6 shows the unit shipment in the IP endpoints market in Asia Pacific in 2010.The IP endpoints market is divided into four segments, which are IP desk phones, softphones, rich media phones, and third-party SIP phones. Softphones is the second-largest segment after IP deskphones.

Chart 1.6
IP Endpoints Market: Unit Shipment (Asia Pacific), 2010

Key Market Drivers

The key market drivers for softphones are given below.

1. The changing nature of workforce and growing number of mobile workers and telecommuters are driving the use and adoption of softphones.
2. Increased implementation of integrated UC interfaces has driven the demand for click-to-call graphical softphone-type interfaces.
3. The implementation of a softphone is generally less expensive than a desktop phone, as the technology requires no hardware beyond a network-connected PC or personal digital assistant (PDA).
4. The cost involved in replacing a softphone is relatively low, and the replacement can be as easy as updating the software version.
5. Because of the ease of upgrading a software application, softphones can continuously broaden the spectrum of features they support, unlike desktop phones purchased at a specific moment.

Smartphones in Enterprises

Since 2007, the smartphone market has grown at an average annual growth rate of 37 percent. The new breed of smartphones with multi-touch technology and improved processing power is bringing about a paradigm shift in user experience. Mobile Web, coupled with fast-maturing cloud computing, is likely to lead to the development of next generation of killer apps. Hence, it is imperative for enterprises to align their mobile strategy with the changing realities of the smartphone landscape. Many telephony vendors have introduced "extension to cellular" solutions. Although wireless access allows one to move around and still be able to call or be called, it is a fundamental element of mobility. However, supporting mobile behavior requires much more than wireless access. Employees require many of the productivity capabilities they have on their deskphone to be on their cellular set.

- Mobile devices and smartphones are increasingly playing a predominant role in enterprise telephony.
- The concept of Fixed Mobile Convergence (FMC) that involves the connection and integration of a mobile device to the existing corporate telephony system has been one of the fastest-growing trends in the last years.
- Smartphones such as those offered by Nokia, Research In Motion (RIM), and Motorola are increasingly being deployed in offices to extend PBX features and functionalities, provide network-roaming capabilities, or extend UC applications and services under the concept of Mobile Unified Communications.
- As FMC grows, mobile manufacturers are continuously landing in the enterprise space seeking to benefit from new market opportunities. One such opportunity is in the mobile office headset space.
- Frost & Sullivan believes that while cell phone vendors have already established important relationships with most PBX vendors to extend PBX features and calling capabilities to mobile devices, mobile office headsets would be the bridge to establish similar future relationships with desktop phone vendors.

Enterprise Tablets

Initially, tablets were introduced for the consumer market. However, they have witnessed a very high adoption in the corporate arena. Increased adoption of tablets may stem from the fact that companies now more products to choose from in the market. In addition to the widely popular iPad and iPad 2 from Apple, Samsung, Motorola, and RIM also offer similar devices.

Once the tablet format becomes widely available and more fully capable of being integrated into the enterprise, one can expect it to gain more adoption. It would be similar in some ways to what happened when laptop computers started becoming affordable enough to replace desktop computers - they started selling in huge numbers and have now topped the older format in sales. Tablets could eventually do this to laptops.

Initially, enterprise tablets are expected to play a role of companion devices in the market. In the enterprise space, for the immediate future, the main use of media tablets is as a notebook companion or as a secondary device to be carried during travelling or use for fast access to e-mail, calendaring, interrogating Web applications and information sources, and showing PowerPoint presentations. To meet that new demand, developers are starting to target the iPad and other forthcoming tablets with business intelligence and productivity software.

Factors Considered by Enterprises while Adopting UC

Enhanced productivity that results from collaboration, more accurate data, a single-user interface, and more informed decisions is difficult to quantify, but there are ways to measure its impact on business performance. Other measures, including the time saved due to the ability of a user to remotely access orders, drawings, or contact information, are more easily quantified. Shorter service appointments, fewer missed calls, and increased customer satisfaction all result in tangible cost savings and even revenue generation.

However, UC can deliver the kind of innovation that enterprises need to remain competitive while delivering solid return on investment (ROI) in either an ownership or hosted model.

The factors considered by enterprises while adopting UC are as follows:

1. <u>Cost of Deployment</u> -Costs involved include those required for network upgrade, UC applications, and administration and management systems. However, like any business or technology transformation project, costs are also incurred in planning, management, procurement, integration with existing systems, process definition, governance, training, and operations and maintenance.
2. <u>Feature Set</u> - Every company is unique. They must be aware of the features available from the vendor and whether the vendor offers timely upgrades or enhancements to its applications.
3. <u>Ease of Integration</u> - Large organizations have various applications that need to be integrated with UC. When determining the best approach for acquiring and managing UC technology, each business must thoroughly assess its requirements.
4. <u>ROI Payback Period</u> - Any effort to implement UC would be based on a business case that quantifies the benefits to the company. Both the ROI and total cost of ownership (TCO) must be calculated and weighed against the savings.
5. <u>Vendor Roadmap</u> - Understanding vendor roadmap is vital before any investment is made. Any enterprise deciding to upgrade its communications infrastructure would look for vendors that can offer the following:
    o A strong product portfolio meeting the business needs of the enterprise
    o Good professional services to smoothly execute the migration or upgrade project
    o Good post-sales product support and maintenance
    o A visionary technology roadmap to ensure that the enterprise is partnering with a vendor that is up-to-date and invests in R&D to keep the enterprise at par or ahead of their its competitors
    Faltering on any of these decision considerations would typically lead to loss of the customer.
6. <u>Operational Benefit</u> - Organizations need to consider the operational benefits UC can provide. A close look at which applications benefit which employees and how they can use them to be more productive is an important first step in determining what UC will mean to an individual business.
7. <u>Ease of Use</u> - The technology must be easy to use to be accepted. When determining the best approach for acquiring and managing UC technology, each business must thoroughly assess its requirements. The types of users and whether they will be comfortable in using this technology.
8. <u>Reliability</u> - Organizations need to consider the reliability of the technology. The UC technology is relatively mature; various components have been in the market for the last ten years. However, customers must review the success the vendor has enjoyed in the market by determining the types of companies that have invested in its UC solution.
9. <u>Security</u> - Security has gained high importance recently. Access to various applications must be governed at the network level.

Enabling Mobility

Mobility is a catalyst for these changes, as traditional ways of doing business and divisions across segments - media, network, and device companies - are changing as the industry converges. Lifestyle convergence is apparent to all - the boundaries of work, family, and home life are no longer solid. Device convergence is happening with handsets, PDAs, PCs, and even television. Content needs to be created just once and delivered in the optimal format for any device the consumer wishes to use. Network convergence is about more

open, IP-based converged network ecosystems that support the essential requirements for network mobility.

Headsets and Portable Endpoints

The changing nature of worker behavior and need for enhanced communications is resulting in the creation of a series of communication tools and devices that are helping the worker to perform his/her job efficiently at any location and on the go. These business endpoints include softphones, UC clients (integrating multiple communication applications such as messaging, presence, conferencing), and mobile soft clients. Headsets are the key element that will allow for continuous communication independent of the type of worker, location, or device being used. Today's workers have to be five times as responsive and agile as their predecessors were. In addition to telephones, they must use tools such as e-mails, calendars, IM, Web conferencing, and presence.

Headset Trends and Key Decision Criteria for Headset Selection

The shift to software-centric solutions and UC is also impacting the communication endpoints market. Telephony vendors are aggressively promoting softphone capabilities by bundling them, for free of cost, with a telephony platform and/or desktop phone. IBM and Microsoft, on the other hand, have evolved their IM clients into feature-rich user interfaces that support IM, telephony, and audio, Web, and video conferencing. In addition, telephony and IM vendors are working together to make their respective clients interoperable.

While most employees continue to use their desktop phones as their primary voice communication devices, businesses are increasingly deploying softphones as adjunct or secondary endpoints. The growth of softphones is driving the demand for high-quality headsets.

Frequently, softphones are used as a cost-effective means of communicating while on the road, as they provide inexpensive long-distance calling using the public Internet and corporate PBX. As advanced softphones share the same number with the user's desktop phone, they allow users to maintain their corporate identity regardless of where their business communications are taking place. UC clients give users remote access to various advanced corporate communications features, including presence, unified messaging, and integration with business applications such as enterprise resource planning (ERP) and customer relationship management (CRM).
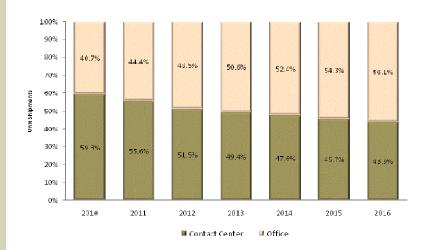
Headset Trends

The key headset trends are mentioned below.

1. While USB-based corded PC headsets are expected to witness the most significant growth within the large office worker segment, wireless headsets that connect to the PC or notebook through a USB device or hub are expected to prevail within the executive and senior management segment. Vendors have improved the wireless headset technology. Hence, the wireless headset segment is expected to drive the office headset sector. Vendors are now offering wireless headsets with sound quality that is comparable to that of wired headsets.

2. Traditionally, only call centre operators required headsets; however, now considering the amount of time an average office worker multi-tasks while on the telephone, they also need them.
3. Increased ranges of headsets are available at various price points. SMBs are now able to afford headsets. Adoption of headsets by SMBs is increasing relatively fast, and high growth is expected over the next few years. Retail as a distribution channel is aiding its market growth. The retail channel is relatively new when compared to others. Headsets within the retail space are sold to office professionals or the consumers as either a new product or a replacement to a low-grade headset.
4. As enterprises start to launch different voice applications such as softphones, audio, video, and Web conferencing through their company's network and using multiple enterprise devices such as PCs, notebooks, and mobile phones, voice quality becomes crucial. The role of office headsets in the UC space will be vital to not only enhance voice quality, but also standardize it across multiple UC applications and devices.
5. Headset vendors are already introducing a growing portfolio of UC headsets that include higher audio bandwidth, superior noise cancellation, and speech recognition capabilities among other features. The aim is to strive for "Unified Voice Quality".
6. The wireless headsets market is likely to witness more growth than the wired headsets market.
7. The office segment is expected to witness the highest growth rate of 26.2 percent from 2011 to 2016. It is anticipated to account for 56.1 percent of the total shipment by 2016. Shipment to the contact centre market is growing at an average annual growth rate of 13.8 percent.

Chart 1.7 shows the percent of unit shipment by end-user segment in the enterprise headsets market in Asia Pacific from 2010 to 2016.

Chart 1.7
Enterprise Headsets Market: Percent of Unit Shipment by End-user Segment (Asia Pacific), 2010-2016

Note: All figures are rounded; the base year is 2010. Source: Frost & Sullivan

Key Decision Criteria for Headset Selection

Currently, headsets come in multiple styles and are used with corded phones, cell phones, and computers. Some of the executives go for high end headsets that are capable to manage multiple phones using the intuitive touch screen, start and end calls, adjust the volume, or switch between desk, soft and mobile phones all from one device. This is the triple connectivity capability that manages calls from deskphone, mobile and softphone using a single headset. Headset users also seek the Bluetooth technology, which integrates cell phones, computers, and PDAs through a short-range radio link. There are two technologies deployed for Wireless headset: DECT and Bluetooth. DECT has a longer range but only limit to a few countries where DECT frequency is approved for use which are Singapore, Hong Kong and Australia.

The key decision criteria for headset selection are as follows:

1. <u>Vendor's Technology and Roadmap</u> - The technology leadership exhibited by the headset vendor and roadmap of future product releases must be articulated to customers. Technology roadmap and product release announcements need to be made regularly to increase customer confidence.
2. <u>Range of Models Offered</u> - Another criterion is the breadth of models available from the vendor, which includes corded and wireless. The various headset styles are on or in-the-ear; over-the-head (binaural or monaural), behind-the-neck, and convertible. In addition, there are headsets for cellular or cordless phones and computers.
3. <u>Simplicity in Integration and Ease of Use - </u>The headset needs to seamlessly connect to a PBX, KTS or IP telephony system. The headset with interoperate with a number of telephony vendors.
4. <u>Competitive Price and ROI Period</u> - Headsets must be priced competitively, and the pricing needs to be justify the technology.
5. <u>Success in the Market and Key Customers Using the Headsets</u> - The level of success the vendor enjoys in the market will also be considered.
6. <u>Service and Support</u> - The support infrastructure offered by the vendor to customers will also influence headset selection.
7. <u>Reliability and Durability</u> - Reliability of headset in terms of quality of sound is also considered before selecting a headset.

GN Netcom – a key player in the headsets market

GN Netcom, is a subsidiary of GN Store Nord, which manufacturers headsets under the Jabra brand. This Danish company is considered a leader in product innovation (first to develop a wireless Bluetooth headset) offering stylish products with attractive designs. This has boded well with their customers especially employees in the enterprises. Their strong business focus and substantial investment and commitment to R&D has enabled them to make tremendous inroads in the market in not only securing wins from local companies but also winning multinational accounts in Asia-Pacific. GN Netcom has a formidable market position in the headset market. They have achieved success in almost all of the Asia-Pacific countries in market share growth.

Conclusion

Continued innovation in the communications endpoint market is likely to result in greater choice, flexibility, and cost savings for IT buyers and their end users. While desktop phones will remain the primary voice communications endpoint for many years to come, softphones and smartphones are gaining grounds in the workplace. Expensive, feature-rich hardware appliances will increasingly be limited to specific settings, such as an executive's desktop, or in environments where mobile devices and softphones simply do not work, such as production floors.

In difficult times, efficiency will differentiate Asian corporations from their competitors. The most efficient companies will find themselves ready to outpace their competitors - and the most efficient are the ones that will invest, intelligently, now. As software telephony capabilities improve, and enterprises increasingly acknowledge the benefits of feature-rich softphones, the question arises whether desktop phones (typically deployed along with the softphones) provide enough value to justify their cost. The average desktop IP phone, which is priced between $150 and $250, takes a lot of desktop space and confuses enterprise employees with multiple buttons and functions.

UC, collaboration and mobility will drive headset adoption. Companies desire to cut down on operation and traveling costs is aiding UC growth which has resulted in conferencing solutions, especially for web and video conferencing to be deployed. There is increase focus on collaboration, in particular web conferencing. Mobility solution is now required driven by softphone adoption, prevalent smartphones in enterprises, and enterprise tablets. The numbers of mobile workers are on the rise, especially in geographically large countries and verticals such as BFSI, professional services, healthcare and logistics/transportation. Increase number of mobile workers and executives are already using more sophisticated mobile devices together with corporate push-mail services to enable them to be more productive while on the road. Growth in business leading to increase in number of remote locations and mobile workers requiring more collaborative communication tools is driving the UC market. Headsets have now become a necessary rather than a luxury.

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