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## Mobile Voice over IP

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*Fixed / Mobile Convergence in the Enterprise*

February 2007



## Executive Summary

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**W**iFi has proven to be a major component of many organizations' networking infrastructures. Extending the use of that resource to include voice communications is the reason organizations are upgrading to 3rd generation WiFi infrastructures with the quality of service, security and hand-off features built-in to satisfy user expectations.

### Key Business Value Findings

- Best-in-Class organizations have on average, **90% of their campus covered by WiFi** for the mobile VoIP solution, as compared to 32% coverage for all others.
- Best-in-Class organizations reach an average **annual cost savings of \$154 per user** from their mobile VoIP implementation and a **49% return on their investment** – almost three times that of all other organizations.
- More than half of best-in-class organizations consider improving workforce productivity the single most important strategic reason to deploy a mobile VoIP solution.

### Implications & Analysis

- 85% of best-in-class organizations have 90% or more of their campuses covered by the mobile VoIP solution compared to 33% of all the others.
- Best-in-Class organizations are four times more likely to have a high level of expertise in integrating their mobile VoIP solution with other unified communications solutions, compared to all the others.
- Best-in-Class organizations are 60% more likely than all others to consider compatibility with existing infrastructure when deploying a mobile VoIP solution.

### Recommendations for Action

1. Deploy a mobile VoIP solution for the productivity benefits first and for the potential cost savings second.
2. Ensure your WiFi network can handle the coverage and bandwidth needs. If necessary, make the upgrades required to ensure the right QoS levels.
3. Deploy a solution that can work seamlessly on and off your campus.
4. Have your mobile VoIP solution tap into the functionality of your PBX system.
5. Develop capabilities to measure the performance of your mobile VoIP solution (e.g.: voice quality, number of dropped calls, etc.) as frequently as possible.

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## Chapter One: Issue at Hand

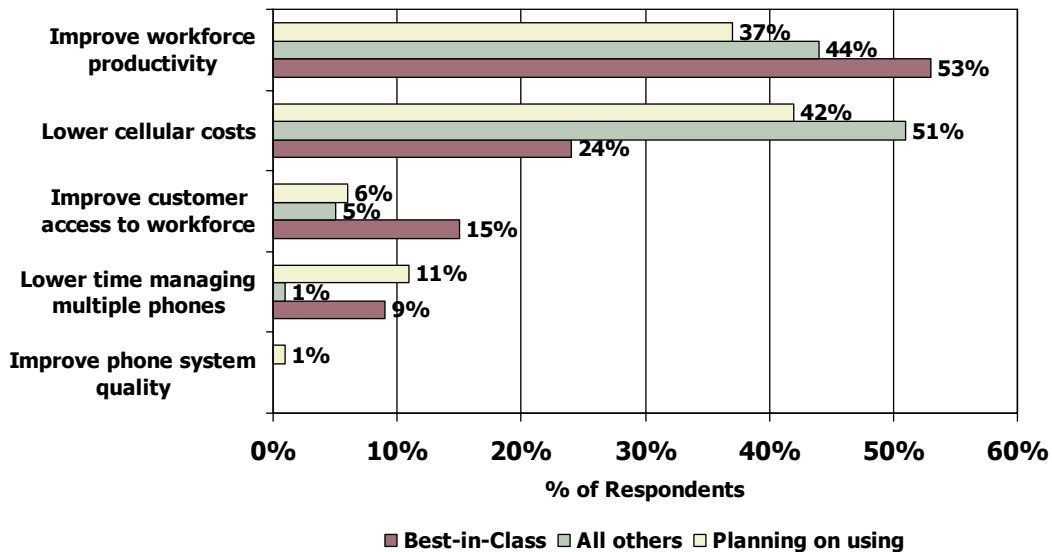
**Key Takeaways**

- 69% of organizations surveyed look to mobile VoIP as a way to enhance productivity, while 60% also expect to reduce their cellular costs.
- 55% of organizations surveyed are moving towards deploying seamless coverage capabilities within their enterprise.
- 78% of Best-in-Class organizations find the business justification of mobile VoIP straight forward while all other survey respondents struggled to understand the business value 48% of the time

Innovations in networking and wireless technologies in the past decade have developed tremendous advances around networking and communication systems that leverage the Internet Protocol (IP) framework in their local area networks (LAN). Today, enterprises commonly use both telephone (PBX) systems based upon IP technology, as well as wireless networks based upon the 802.11 set of standards.

As organizations continue to deploy and gain confidence in the use of secure wireless LANs, they are also looking to leverage its capabilities and capacity beyond the traditional use for notebook computers. This adoption, in conjunction with the pervasiveness of mobile phones used to ensure 24/7 access and communication with the off campus workforce, is creating a burgeoning market for the adoption of mobile phones that are able to leverage both cellular and wireless LAN networks.

**Figure 1: #1 Strategic Reason to Implement a Mobile VoIP Solution**



Source: AberdeenGroup, February 2007



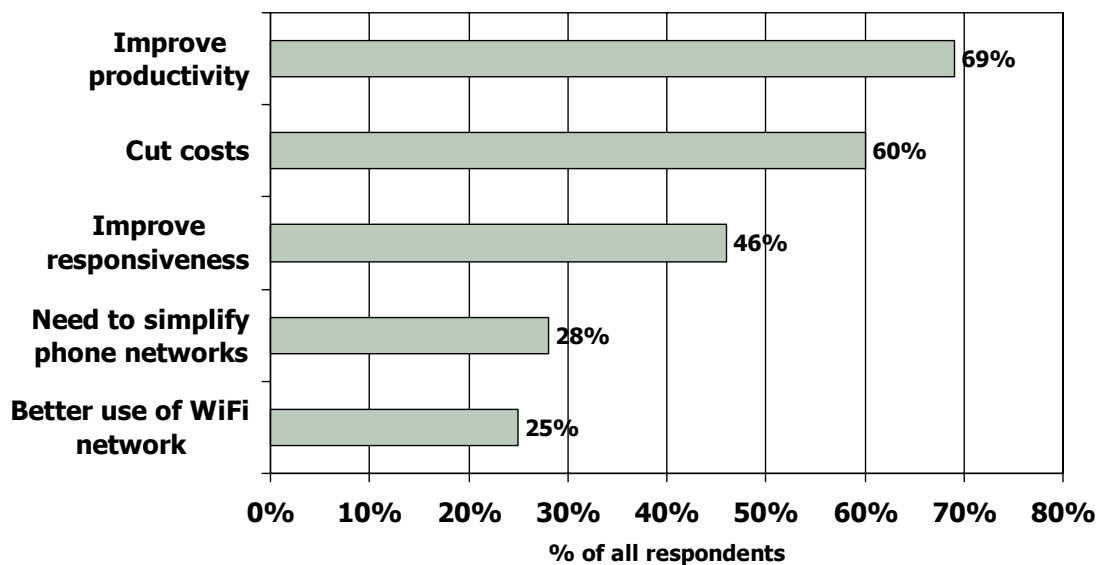
Aberdeen’s research shows that more than half of best-in-class organizations consider improving workforce productivity the single most important **strategic** reason to deploy a mobile VoIP solution. In fact, Best-in-Class organizations consider the potential reduction in cellular costs from deploying a mobile VoIP solution as far less of a key motivator than all other users or those who are planning on deploying a mobile VoIP solution. A sales director at a **leading publishing firm** stated “the only reason to change existing business practices is to improve something [...] and we think mobile VoIP can help our sales team be more productive.”

This shows that the Best-in-Class organizations understand that the value in deploying a mobile VoIP solution is not in its ability to reduce or transfer costs, but instead an opportunity to enhance the productivity of their workforce by improving their ability to be contacted by customers and colleagues anytime, anywhere on or off campus, from one single number.

### Drivers and Strategies

Aberdeen’s research shows that organizations’ key drivers for implementing a mobile VoIP solution revolve around productivity improvements, such as reduced down time or the ability to ensure increased accessibility to customer needs and cost control. Organizations are also looking to simplify the management of their communication networks, and see an opportunity to take better advantage of their wireless infrastructure in order to improve the mobility of their workforce.

**Figure 2: Top 5 Drivers for Deploying a Mobile VoIP Solution**



Source: AberdeenGroup, February 2007

In order to address these issues, Best-in-Class organizations are taking the following actions:

1. Developing seamless coverage capabilities within the enterprise;



2. Unifying mobile voice and multimedia capabilities for mobile workers;
3. Implementing a presence application (such as mobile instant messaging) to use within the mobile VoIP solution;
4. Integrating the mobile VoIP solution with other unified communications applications such as conferencing and telecommuting solutions;
5. Deploying dual-mode handsets for seamless hand-offs to cellular networks .

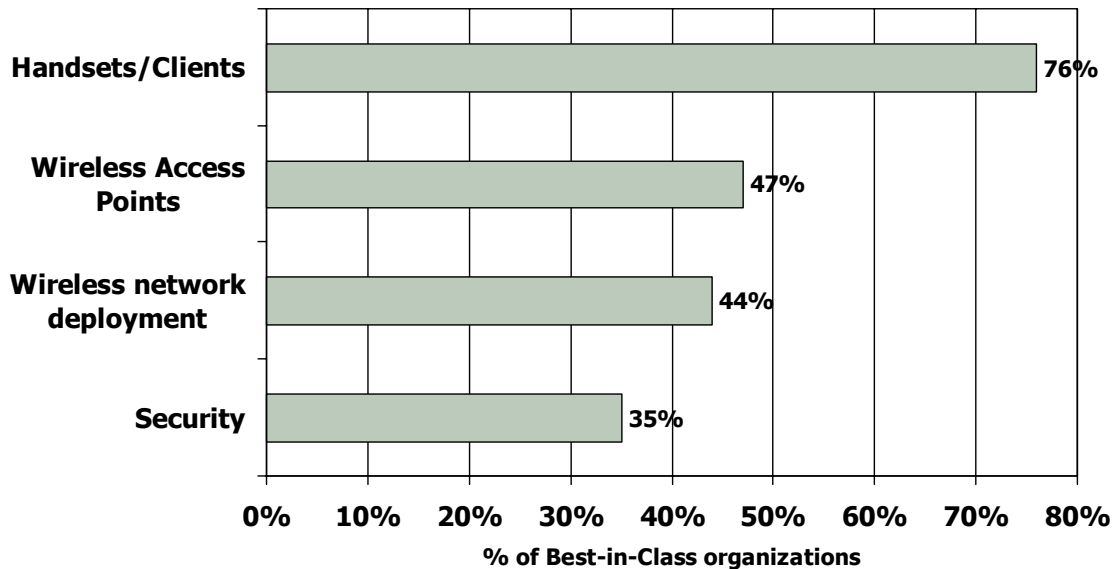
These actions point to best-in-class organizations’ desire to empower their workforce with a truly integrated and multimedia mobile phone experience, providing them as much communication connectivity as possible while individuals “roam” across their organization’s campus.

### Who is Purchasing What, Where?

Survey respondents also provided insight into how they went or would go about purchasing a mobile VoIP solution. The data shows that best-in-class organizations overwhelmingly (79%) looked to the manufacturers of these solutions for their purchases.

Best-in-Class organizations are focusing a majority of their mobile VoIP investments on handsets and soft clients. This is not surprising, as most best-in-class organizations will already have strong wireless networks in place. For **Ingate Systems**, an enterprise fire-wall manufacturer, the key is to implement dual-mode devices. Ingate’s vice-president of

**Figure 3: Key Areas of Investment in the Mobile VoIP Solution**



Source: [AberdeenGroup](#), February 2007

operations stated “We are a rather distributed international organization where many employees work from home and travel a lot. Flexibility and good communication are key requirements for us...We are looking at devices that seamlessly can do handover between



a VoIP (WiFi) connection and GSM.” Another **publishing firm** shared with Aberdeen that “handsets with clients represent the biggest roll-out and on-going costs. Connecting to an existing IP-PBX probably represents a commitment to UC on a broad basis.”

This does not mean however that even best-in-class organizations are not continuing to invest in their wireless networks. Aberdeen’s research shows that almost half of best-in-class organizations, and only one third of all other organizations, are continuing to improve their wireless infrastructure by adding more access points to ensure the proper quality of service (QoS) levels for both voice and data transmissions.

### Challenges and Responses

Table 1 shows that slightly more than half of the survey respondents see security as the key challenge to an effective mobile VoIP deployment. However, even though 56% of respondents indicated security as the major challenge, only 53% of organizations are taking measures to address that challenge. While this statistic is surprising unto its own, what is more surprising is that best-in-class organizations don’t fare much better. Only 62% of best-in-class organizations are taking actions to address this security issue.

Additionally, 52% of survey respondents indicated that they find roaming and coverage a serious challenge, but only 38% of all organizations – including best-in-class - are upgrading their access points to support WiFi technologies from the 802.11 standards. Organizations need to take specific actions to address the coverage and security issue by upgrading the WLAN access points and security layers.

**Table 1: Mobile VoIP Implementation Challenges and Best-in-Class Responses**

Top 5 Challenges	% Selected	Best-in-Class Responses to Challenges	% Selected
Security	52%	Add a security layer	62%
Roaming and Coverage	52%	Develop needs assessment around mobile VoIP	59%
Audio quality (QoS)	51%	Leverage software for seamless handover to wireless networks	48%
Implementation and maintenance costs	33%	Use dual-mode handsets	41%
Battery power	32%	Upgrading Access Points	38%

Source: AberdeenGroup, February 2007

The data shows that organizations need to take a more systematic approach around the implementation of a mobile VoIP solution. While all respondents still have room for improvement in terms of how they are going about their implementations, the survey responses show that best-in-class organizations are more effectively:

- Developing a technological and functional needs assessment around mobile VoIP;



- Identifying the major challenges (including battery consumption, coverage and voice quality) within the solution;
- Understanding how these challenges affect the effectiveness ultimately the value of any implementation.

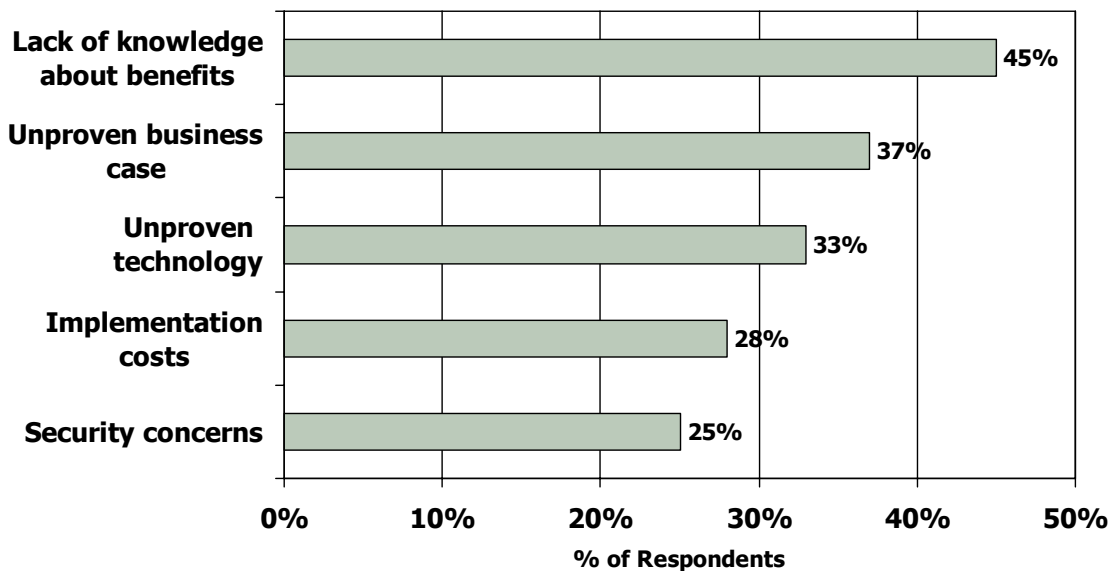
However, industry average and laggard organizations are taking an “ad hoc” approach to leveraging mobile VoIP. This approach makes it significantly more difficult for them to understand the value proposition of mobile VoIP solutions. The end-result is that 78% of best-in-class organizations find the business justification of mobile VoIP straight forward while all other survey respondents struggled to understand the business value 48% of the time. “The value was clear to us. [The solution] allows you to be connected when in WLAN/HotSpots and when on the road and at the same time always have access to your IP-PBX services”, said **a consultant at a leading Canadian consulting firm**.

### What’s Preventing the Adoption of Mobile VoIP?

Figure 4 shows the major obstacles preventing the adoption is a lack of knowledge about the benefits of mobile VoIP and an unproven business case regarding the solution.

The data shows that organizations need to gain a better understanding of the value proposition of mobile VoIP technologies available in the market. Furthermore, all of the major obstacles are rooted in a lack of knowledge regarding a technology or a lack of understanding of mobile VoIP value proposition.

**Figure 4: Obstacles in the Adoption of Mobile VoIP Solution**



Source: [AberdeenGroup](#), February 2007

This is an opportunity for providers of mobile VoIP solutions and services to demonstrate the value that the enhanced mobility can provide and show how these solutions can help companies achieve their goals.



## Chapter Two: Key Business Value Findings

### Key Takeaways

- Best-in-Class organizations have on average, 90% of their campus covered by WiFi for the mobile VoIP solution, as compared to 33% coverage for all others.
- Best-in-Class organizations reach an average annual cost savings of \$154 per user.
- Best-in-Class organizations achieve a 49% return on their mobile VOIP investment – almost three times that of all other organizations.

Strategies to improve workforce productivity through the use of mobile VoIP are only as good as the results they deliver. As such, Aberdeen used three key performance criteria to distinguish best-in-class companies from average and laggard companies. These key performance indicators (KPIs) represent operational and financial measures. (Table 2):

- Percentage of corporate campus covered by the mobile VoIP solution;
- Penetration rate of the mobile VoIP solution within the organization;
- Percentage of total calls made on the mobile VoIP solution;
- Benefits to the organization as measured by annual financial savings and ROI from the mobile VoIP implementation.

Based upon aggregate scores that incorporated all four of these metrics, those companies in the top 20% achieved “best-in-class” status, those in the middle 50% were “average,” and those in the bottom 30% were “laggard.”

**Table 2: Companies with Top Performance Scores Earn “Best-in-Class” Status**

Definition of Maturity Class	Mean Class Performance
<b>Best-in-Class:</b> Top 20% of aggregate performance scorers	<ul style="list-style-type: none"> <li>• 90% of the organization’s campus is covered by WiFi for the mobile VoIP solution</li> <li>• 51% of the organization uses the mobile VoIP system on a regular basis</li> <li>• 43% of their voice communications are made over their mobile VoIP system</li> <li>• Reach an annual cost savings of \$154 per user and a 49% ROI</li> </ul>



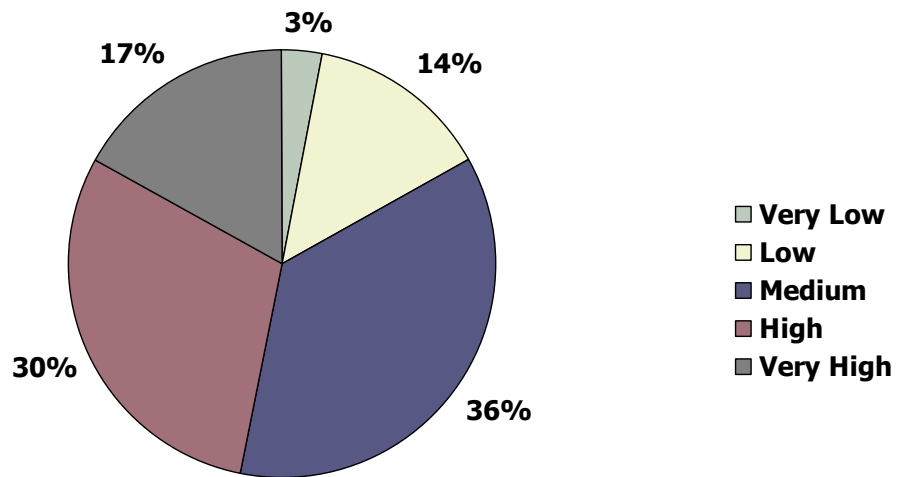
Definition of Maturity Class	Mean Class Performance
<p><b>Average:</b> Middle 50% of aggregate performance scorers</p>	<ul style="list-style-type: none"> <li>• 68% of the organization’s campus is covered by WiFi for the mobile VoIP solution</li> <li>• 42% of the organization uses the mobile VoIP system on a regular basis</li> <li>• 38% of their voice communications are made over their mobile VoIP system</li> <li>• Reach an annual cost savings of \$99 per user and a 20% ROI</li> </ul>
<p><b>Laggards:</b> Bottom 30% of aggregate performance scorers</p>	<ul style="list-style-type: none"> <li>• 18% of the organization’s campus is covered by WiFi for the mobile VoIP solution</li> <li>• 28% of the organization uses the mobile VoIP system on a regular basis</li> <li>• 16% of their voice communications are made over their mobile VoIP system</li> <li>• Reach an annual cost savings of \$87 per user and a 16% ROI</li> </ul>

Source: AberdeenGroup, February 2007

### By the Numbers

Among the most telling findings in these three performance areas is that over half of polled organizations consider the quality of their mobile VoIP solution to be medium or lower. This statistic points to the need for organizations to increase the robustness of their mobile VoIP solution – that is the bandwidth, number of access points, systems to reduce radio interference - and address the challenges noted earlier (Figure 5).

**Figure 5: Quality of Mobile VoIP Solution**



Source: AberdeenGroup, February 2007



The largest portion of respondents (36%) stated that the quality of their mobile VoIP solution was medium, while 17% of respondents rated their mobile VoIP solution as low or very low – two figures that will only curb the adoption of the technology within the enterprise. A **multi-national IT organization** Aberdeen interviewed relies on its wireless network to ensure that the mobile VoIP solution is as strong as its standard data connectivity. “We are using the same network for data and voice so it is important to keep good performance and quality in the network to achieve high voice quality.”

Aberdeen’s data shows that organizations can benefit from replicating the actions of best-in-class organizations, as 82% of best-in-class organizations rated the quality of their solution as high or very high. As 34% of best-in-class organizations also stated that they would rate their willingness to pay a premium for enterprise wireless telephony, the data suggests that making the proper investments in handsets and network infrastructure will pay off in terms of higher system quality and thus ultimately deliver improved productivity and ROI.

**Table 3: Departments that Most Commonly Use Mobile VoIP**

Best-in-Class	% Selected	Industry Average	% Selected	Laggards	% Selected
Sales	70%	Sales	59%	IT	62%
IT	55%	IT	54%	Sales	55%
Customer Service	48%	Customer Service	51%	Customer Service	40%

Source: AberdeenGroup, February 2007

Best-in-Class organizations are providing mobile VoIP solutions most frequently and aggressively to their sales organizations in order to maintain and build client relationships – as 61% of best-in-class organizations stated that they were implementing a mobile VoIP solution to improve their workforce’s responsiveness to customer needs. While industry average organizations are also deploying mobile VoIP solutions most frequently to their sales force, they are doing so less aggressively. On the other hand, laggard organizations are still deploying mobile VoIP solutions for the most part within their IT departments.

This data shows that best-in-class organizations have come to understand that mobile VoIP solutions are an effective tool to deploy when ensuring that customer access to the workforce can become a competitive advantage and business growth driver.



## Chapter Three: Implications & Analysis

**Key Takeaways**

- 85% of Best-in-Class organizations have 90% or more of their campuses covered by the mobile VoIP solution compared to 35% of all the others.
- Best-in-Class organizations are four times more likely to have a high level of expertise in integrating their mobile VoIP solution with other unified communications solutions, compared to all the others.
- Best-in-Class organizations are 60% more likely to consider compatibility with existing infrastructure when deploying mobile VoIP solution compared to all the others.

As shown in Table 4, survey respondents fell into one of three categories – Laggard, Industry Average, or Best in Class — based on their characteristics in four key categories: (1) process (criteria being used when deploying mobile VoIP solution); (2) organization (deployment of mobile VoIP across departments within the organization); (3) knowledge (level of awareness of benefits from deployment of mobile VoIP solution); and (4) technology (percentage of campus covered by mobile VoIP solution).

In each of these categories, survey results show that the firms exhibiting best-in-class field service characteristics also enjoy best-in-class customer service and financial performance.

**Table 4: Mobile VoIP Competitive Framework**

	Laggards	Industry Average	Best in Class
Process	<ul style="list-style-type: none"> <li>• Top criteria for selecting mobile VoIP solution provider is cost of the solution.</li> </ul>	<ul style="list-style-type: none"> <li>• Top criteria for selecting a mobile VoIP solution provider are reliability and vendor reputation.</li> </ul>	<ul style="list-style-type: none"> <li>• Top criteria for selecting mobile VoIP solution provider is compatibility with planned or existing infrastructure in place.</li> </ul>
Organization	<ul style="list-style-type: none"> <li>• Mobile VoIP solution predominantly deployed within IT department</li> </ul>	<ul style="list-style-type: none"> <li>• The majority of deployment of mobile VoIP solution is within sales, IT and customer service departments.</li> </ul>	<ul style="list-style-type: none"> <li>• Mobile VoIP solution predominantly deployed within sales, and customer service departments.</li> </ul>



	Laggards	Industry Average	Best in Class
Knowledge	<ul style="list-style-type: none"><li>• Low level of knowledge about full benefits from deploying mobile VoIP solution</li></ul>	<ul style="list-style-type: none"><li>• Moderate level of knowledge about full benefits from deploying mobile VoIP solution</li></ul>	<ul style="list-style-type: none"><li>• High level of knowledge about full benefits from deploying mobile VoIP solution</li></ul>
Technology	<ul style="list-style-type: none"><li>• Under 50% of organization's campus covered by the mobile VoIP solution</li></ul>	<ul style="list-style-type: none"><li>• 50-80% of organization's campus covered by the mobile VoIP solution</li></ul>	<ul style="list-style-type: none"><li>• 90% or more of organization's campus covered by the mobile VoIP solution</li></ul>

Source: AberdeenGroup, February 2007

### Process and Organization

Best-in-Class organizations are 60% more likely to consider compatibility with existing infrastructure when deploying mobile VoIP solution compared to all the others, most likely based upon the prior investments they have made in their communications infrastructure. On the other side, Industry Average and Laggard organizations are 76% more likely to consider the cost of adopting the solution than best-in-class organizations. The approach that best-in-class organizations are taking takes into consideration all components and functionalities of an enterprise mobile VoIP solution such as handsets, wireless network, IP PBX capabilities, and network management solution. The **Canadian consultancy** that Aberdeen interviewed adds “With our [vendor] solution, we get all the IP-BPX functions we need that are in the network.”



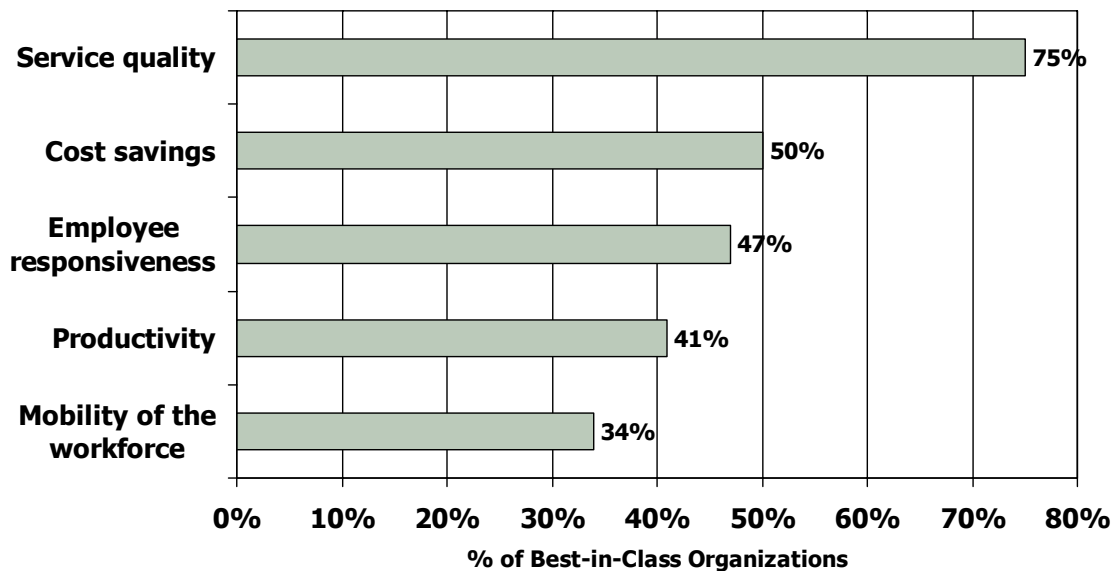
## Chapter Four: Recommendations for Action

**Key Takeaways**

- Deploy a mobile VoIP solution for the productivity benefits first and for the potential cost savings second.
- Ensure your WiFi network can handle the coverage and bandwidth needs.
- Deploy a solution that can work seamlessly on and off your campus.
- Leverage your mobile VoIP solution to tap into the functionality of your PBX system.
- Develop capabilities to measure the performance of your mobile VoIP solution as frequently as possible.

The adoption of enterprise mobile VoIP solutions is driven by best-in-class organizations by improved productivity and collaboration, improving responsiveness to customer and staff needs and lowering cellular communications costs. Enterprises are increasingly adopting mobile VoIP solutions and also looking at unifying the mobile VoIP solution into their existing IP-PBX systems to ultimately provide a more unified communications experience.

**Figure 6: Best-in-Class Key Performance Indicators (KPI) for Measuring Mobile VoIP Value**



Source: [AberdeenGroup](#), February 2007

The effectiveness of a mobile VoIP implementation depends on the approach that an organization is taking, as well as the key performance indicators that are developed in the



planning process. Figure 6 shows key performance indicators that Best-in-Class organizations most frequently use when adopting mobile messaging solutions.

Whether an organization is trying to move its mobile VoIP implementation from “Laggard” to “Industry Average,” or “Industry Average” to “Best in Class,” the following actions will help spur the necessary performance improvements:

- 1. Deploy a mobile VoIP solution for the productivity benefits first and for the potential cost savings second.**

While there are certainly potential benefits from lowering an organization’s cellular communication costs, the true benefits of implementing a mobile VoIP solution come from the enhanced productivity that it can provide to a workforce. The true ROI from this investment will come from how the solution enhances your organizations “top line” and not the impact on the “bottom line.”

- 2. Ensure your WiFi network can handle the coverage and bandwidth needs.**

Depending on the solution and radio bands selected, the bandwidth requirements of a mobile VoIP solution can be demanding. Ensure that your organization has enough access points in place to provide pervasive coverage across your campus, but also ensure that you have the proper quality of service (QoS) systems in place to ensure that other data traffic does not negatively impact the voice communication traffic. This requires extensive effort to design an effective network.

- 3. Deploy a solution that can work seamlessly on and off your campus.**

Best-in-Class organizations extend the mobility of their workforce by ensuring that the mobile VoIP solution can work beyond the walls of their main campus. Provide your workforce the infrastructure (both from a hardware and software perspective) so that they can use the mobile VoIP handsets in remote locations such as their home or your organization’s branch locations.

- 4. Leverage your mobile VoIP solution to tap into the extended functionality of your PBX system.**

One of the greatest benefits of implementing a mobile VoIP solution for on or off campus workers is the ability to integrate enhanced PBX style features onto the handsets. Best-in-class organizations have mobile VoIP solutions that can handle features such as call transfer, configurable call forwarding and conferencing.

- 5. Develop capabilities to measure the performance of your mobile VoIP solution as frequently as possible.**

Whether it’s tracking the impact on the wireless network, overall voice quality, number of dropped calls, or the number of calls placed away from vs. at the phone’s base, develop a plan that provides you the tools to then develop a ROI model. Best-in-class organizations measure the performance of their mobile VoIP solution on a daily or real-time basis five times more frequently than all others.

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## Author Profile

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### ***Philippe Winthrop***

#### ***Research Director - Wireless and Mobility***

Philippe Winthrop is a Research Director in Aberdeen Group's Wireless and Mobility Research Practice. In this capacity, Philippe brings his expertise for all things wireless and researches the impact of disruptive technologies, including WiFi, PDAs, mobile devices, and Mobile VoIP, on the business value chain.

Prior to joining Aberdeen Group, Philippe spent over 10 years in various research and strategic planning positions. At The George P. Johnson Company (GPJ), an integrated event marketing agency, Philippe provided market research and consulting services to organizations in the IT, logistics and automotive industries.

Before GPJ, Philippe was a principal at Axle Ventures, which provided business planning and consulting services based on objective market research. In that capacity, Philippe helped develop business strategies for both established and start-up organizations in IT, eCommerce, and healthcare. Philippe began his research career at IDC where he covered IT Services for Western Europe, providing analysis and insight to Fortune 500 companies as well as the top 50 Western EMEA IT service providers.

Philippe holds a Bachelor of Arts degree in Economics with a concentration in Romance Languages from Boston College, as well as a Master of Arts degree in International Economics and Finance from Brandeis University, incorporating studies at Université de Paris IX – Dauphine.

### ***Bojan Simic***

#### ***Research Analyst - Wireless and Mobility***

Bojan Simic performs fact-based research within the Communications Practice, with a specific focus on wireless and mobility. He brings to Aberdeen Group years of experience in the bio-tech, content management, and public administration. Through benchmarking studies and extended research, Simic provides insights on how companies can leverage wireless and mobile technologies to gain a competitive edge, achieve operational excellence, and realize efficient operations.

Simic holds a B.A. in Economics from Belgrade University in Belgrade, Serbia and a M.B.A. from McCallum Graduate School of Business at Bentley College.



## Appendix A: Research Methodology

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Between January and February 2007, Aberdeen Group, *Business Communications Review* and *Mobile Enterprise Magazine* examined the services parts management procedures, experiences, and intentions of more than 300 enterprises in aerospace and defense (A&D), automotive, high-tech, industrial products, and other industries.

Responding supply chain, logistics, and operations executives completed an online survey that included questions designed to determine the following:

- Which mobile VoIP services and applications are organizations deploying or considering deploying?
- What factors are driving the adoption of enterprise mobile VoIP solutions?
- What decision criteria are being used for these deployments?
- What capabilities do organizations need to develop to effectively leverage mobile VoIP solutions?

Aberdeen supplemented this online survey effort with telephone interviews with select survey respondents, gathering additional information on their mobile VoIP implementation strategies, experiences, and results.

The study aimed to identify emerging best practices for implementing mobile VoIP solutions and provide a framework by which readers could assess their own mobile VoIP implementations and plans.

Responding enterprises included the following:

- **Job title/function:** The research sample included respondents with the following job titles: CIO or other C-level officer (20%), VP or Director (19%) Manager (27%); and staff members/consultants (28%).
- **Industry:** The research sample included respondents predominantly from manufacturing industries. Telecommunications organizations represented 60% of the sample, followed high-tech companies, which accounted for 26% of respondents. Other sectors responding included automotive, retail, medical equipment, construction/engineering, and distribution.
- **Geography:** Slightly less than half of respondents (46%) were from North America. An additional 41% were from Europe, Middle East and Africa and 13% from the Asia-Pacific region.
- **Company size:** About 22% of respondents were from large enterprises (annual revenues above US\$1 billion); 32% were from midsize enterprises (annual revenues between \$50 million and \$1 billion); and 46% of respondents were from small businesses (annual revenues of \$50 million or less).



Solution providers recognized as sponsors of this report were solicited after the fact and had no substantive influence on the direction of the *Mobile Voice over IP - Fixed Mobile Convergence in the Enterprise*. Their sponsorship has made it possible for Aberdeen Group and *Business Communications Review* and *Mobile Enterprise Magazine* to make these findings available to readers at no charge.

**Table 5: PACE Framework**

PACE Key
Aberdeen applies a methodology to benchmark research that evaluates the business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes. These terms are defined as follows:
<i>Pressures</i> — external forces that impact an organization’s market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)
<i>Actions</i> — the strategic approaches that an organization takes in response to industry pressures (e.g., align the corporate business model to leverage industry opportunities, such as product/service strategy, target markets, financial strategy, go-to-market, and sales strategy)
<i>Capabilities</i> — the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products/services, ecosystem partners, financing)
<i>Enablers</i> — the key functionality of technology solutions required to support the organization’s enabling business practices (e.g., development platform, applications, network connectivity, user interface, training and support, partner interfaces, data cleansing, and management)

Source: [AberdeenGroup](#), February 2007



**Table 6: Relationship between PACE and Competitive Framework**

PACE and Competitive Framework How They Interact
<p>Aberdeen research indicates that companies that identify the most impactful pressures and take the most transformational and effective actions are most likely to achieve superior performance. The level of competitive performance that a company achieves is strongly determined by the PACE choices that they make and how well they execute.</p>

Source: [AberdeenGroup](#), February 2007

**Table 7: Competitive Framework**

Competitive Framework Key
<p>The Aberdeen Competitive Framework defines enterprises as falling into one of the three following levels of mobile VoIP practices and performance:</p> <p><i>Laggards (30%)</i> — Mobile VoIP practices that are significantly behind the average of the industry, and result in below average performance</p> <p><i>Industry Norm (50%)</i> — Mobile VoIP practices that represent the average or norm, and result in average industry performance.</p> <p><i>Best-in-Class (20%)</i> — Mobile VoIP practices that are the best currently being employed and significantly superior to the industry norm, and result in the top industry performance.</p>

Source: [AberdeenGroup](#), February 2007



## *Appendix B:* **Related Aberdeen Research & Tools**

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Related Aberdeen research that forms a companion or reference to this report includes:

- The Enterprise Mobile Messaging Benchmark Report (December 2006)
- The Real Cost of Enterprise Wireless Mobility (December 2006)
- Beyond Dial-Tone: Unified Communications Benchmark Report (December 2006)
- Enterprise Mobile Adoption: a Corporate Conundrum (October 2006)

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