Wireless Expense Management
Control International Roaming and the BYOD Revolution

October 2011
Hyoun Park
Executive Summary

This report shows the strategies and tactical execution that have allowed companies to reduce their wireless expenses by 25% or more compared to their representative peers. By understanding how contract negotiations, invoice management, device management, rate plan optimization and other key mobility trends have contributed to cost reduction, this report shows differences between capabilities which are currently standard and those providing additional value. This research is based on the responses of over 110 companies surveyed in August and September of 2011.

Best-in-Class Performance

Aberdeen used the following two key performance criteria to distinguish Best-in-Class companies:

- $27 per user per month for data costs (31% less than Industry Average)
- $31 per user per month for voice costs (26% less than Industry Average)

Competitive Maturity Assessment

Survey results show that the firms enjoying Best-in-Class performance shared several common characteristics, including:

- 20% greater probability of focusing on optimizing carrier contracts as a key strategic action compared to all other organizations
- Being 40% more likely to track international roaming costs than all other companies
- Being 65% more likely than all other respondents to have an electronic method of approving device orders
- Being 67% more likely than all other companies to have a rate plan optimization solution

Required Actions

To achieve Best-in-Class performance, companies must:

- Improve both managerial and end-user visibility to wireless expenses. Best-in-Class companies give both sides of this relationship visibility to the costs accrued from mobility.
- Optimize invoice analysis. This includes both the processing and dispute processes associated with invoices. By keeping these invoices clean, firms can avoid ongoing errors.
- Develop real-time and integrated wireless expense management that places these costs in context of all technology spend.
Wireless Expense Management: Control International Roaming and the BYOD Revolution

Table of Contents

Executive Summary.......................................................................................................2

Best-in-Class Performance..........................................................................................2

Competitive Maturity Assessment............................................................................2

Required Actions.......................................................................................................2

Chapter One: Benchmarking the Best-in-Class....................................................4

Business Context .....................................................................................................4

The Maturity Class Framework..................................................................................5

The Best-in-Class PACE Model................................................................................5

Best-in-Class Strategies............................................................................................6

Chapter Two: Benchmarking Requirements for Success.......................................10

Competitive Assessment...........................................................................................11

Capabilities and Enablers.......................................................................................12

Chapter Three: Required Actions.........................................................................18

Laggard Steps to Success.......................................................................................18

Industry Average Steps to Success........................................................................19

Best-in-Class Steps to Success...............................................................................20

Appendix A: Research Methodology.......................................................................22

Appendix B: Related Aberdeen Research...............................................................24

Figures

Figure 1: Key Pressures for Wireless Expense Management.................................4

Figure 2: Laggard Strategies for Wireless Expense Management.......................7

Figure 3: Wireless Expense Processes for the Best-in-Class...............................13

Figure 4: Champions of Wireless Expense Management......................................14

Figure 5: Best-in-Class Wireless Expense Management Tech................................15

Figure 6: Managed Service vs. Manual Wireless Expense.....................................17

Tables

Table 1: Top Performers Earn Best-in-Class Status..............................................5

Table 2: The Best-in-Class PACE Framework.......................................................6

Table 3: Mobile Device Adoption...........................................................................9

Table 4: The Competitive Framework...................................................................12

Table 5: Top Performers Earn Best-in-Class Status............................................16

Table 6: The PACE Framework Key......................................................................23

Table 7: The Competitive Framework Key..........................................................23

Table 8: The Relationship Between PACE and the Competitive Framework.......23
Chapter One: Benchmarking the Best-in-Class

Business Context

Enterprises are challenged to support the cost structure for the rapidly expanding environment of enterprise mobility as it has quickly transformed from a simple ecosystem of pagers and feature phones to a complicated amalgamation of devices, usage options, and services. The transformation of enterprise mobility has resulted in the increased use of data, international roaming, and the challenges associated with the emergence of Bring Your Own Device (BYOD) policies in the workplace.

The onslaught of mobile devices that has taken place is reflected in the key pressures that companies identify for wireless expense management. The challenges of managing more devices and more usage have become just as important as the need to reduce costs. It is no longer sufficient to reduce wireless costs; companies also struggle with the usage, device management, and contract management associated with the increasing complexity of enterprise mobility (Figure 1).

Figure 1: Key Pressures for Wireless Expense Management

- **Increased usage of mobile devices in the organization**: 57%
- **General business demand to reduce operational expenses**: 55%
- **Escalating cost of devices, voice plans, and data plans**: 44%

Source: Aberdeen Group, September 2011

All of these trends have resulted in increasing volatility in the management of wireless expenses. However, despite increasing use and complexity, wireless cost management practices are still immature.

Why? Despite being a multi-million dollar expense in many organizations, wireless expenses average between 0.1% and 0.2% of a company’s revenues and is often seen as a rounding error from a strategic perspective.
Wireless Expense Management: Control International Roaming and the BYOD Revolution

However, that small percentage extrapolates into a multi-million dollar expense for a billion dollar enterprise and includes multiple opportunities for cost reduction. This point is especially important for low-margin organizations to consider, as a million dollar reduction for wireless expenses can either be transferred to net income or be used to fund additional communications or technologies endeavors.

The Maturity Class Framework

Aberdeen used two key performance criteria to distinguish the Best-in-Class for Wireless Expense Management (WEM) from Industry Average and Laggard organizations: mobile voice costs and mobile data costs on a per user and per month basis.

Table 1: Top Performers Earn Best-in-Class Status

<table>
<thead>
<tr>
<th>Definition of Maturity Class</th>
<th>Mean Class Performance</th>
</tr>
</thead>
</table>
| **Best-in-Class:** Top 20% of aggregate performance scorers | - $27 per user per month for data costs (31% less than Industry Average)  
- $31 per user per month for voice costs (26% less than Industry Average) |
| **Industry Average:** Middle 50% of aggregate performance scorers | - $38 per user per month for data costs  
- $42 per user per month for voice costs |
| **Laggard:** Bottom 30% of aggregate performance scorers | - $41 per user per month for data costs (7% greater than Industry Average)  
- $55 per user per month for voice costs (31% greater than Industry Average) |

Source: Aberdeen Group, September 2011

Best-in-Class companies also saw additional benefits associated with their optimized management. The average respondent had $2.9 million in mobility spend last year. The Best-in-Class were, on average, 6% below budget due to the additional cost reduction opportunities gained from improved visibility while Laggards averaged mobility spend that was 8% above budget due to uncontrolled costs. This represents almost $380,000 in financial benefits over the course of a year on an ongoing basis.

The Best-in-Class PACE Model

Using WEM to achieve corporate goals requires a combination of strategic actions, organizational capabilities, and enabling technologies that can be summarized as follows:

- Ensure that carrier contracts are benchmarked based on the needs of the organization and not the carrier
- Gain centralized visibility to wireless expenses
- Develop automated and online workflows to manage wireless activity
- Gain executive buy-in and visibility to the importance of reducing wireless costs

### Table 2: The Best-in-Class PACE Framework

<table>
<thead>
<tr>
<th>Pressures</th>
<th>Actions</th>
<th>Capabilities</th>
<th>Enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increased usage of mobile devices</td>
<td>• Optimize carrier contracts</td>
<td>• Online or email-based approval for wireless orders</td>
<td>• Wireless Invoice Processing Service</td>
</tr>
<tr>
<td></td>
<td>• Centralize corporate Wireless Expense Management</td>
<td>• Scheduled inventory and billing audits</td>
<td>• Wireless Inventory Module</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Procurement executive champion for wireless expense reduction</td>
<td>• Dispute Management Module</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Employee alerts for billed usage outside of corporate policies</td>
<td>• Outsourced Wireless Help Desk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ability to track international roaming costs</td>
<td>• Unlocked cell phones and SIM cards</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Wireless Expense Management connected to landline expense solution</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Service orders directly processed by wireless carrier</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, September 2011

### Best-in-Class Strategies

Aberdeen has encountered two key strategies that are consistent among all maturity classes for managing wireless expenses: **optimizing carrier contracts** and **centralizing wireless expense management at a single source**.

Carrier contracts represent the base of any relationship between an organization and its wireless providers. To **optimize carrier contracts**, end user organizations must include adequate terms of engagement, well-defined service level agreements, and, of course, the most equitable and competitive pricing that is available for the end user organization. One of the core mistakes that companies make in negotiating their contracts is to benchmark their contracts and budgets based on their prior year. Although this is a typical financial approach, contracts should reflect the current free market environment for all services contracted. This includes adjustments based on new technologies and services being provided in conjunction with mobile devices, such as applications that allow for free or discounted calling, fixed mobile convergence, or international roaming agreements. If a revolutionary technology reduces wireless costs by 90% and your organization negotiates a 20% discount, you may feel victorious but the carrier has actually won the battle. To make sure that your organization has optimized its contracts, it must be up-to-date on current contracts, current benchmarked prices in the free market, and alternate carriers and solutions that can be used in place of current communications tools. Because of the specialized nature of this knowledge, few organizations are truly structured to optimize their contracts even though 47% of organizations identified contract optimization as a core strategy for wireless expense management.
Similarly, a third of respondents across all maturity classes identified the centralization of wireless expense management as being strategically important to their organization's approach to reducing costs. This centralization of rate plan optimization, dispute management, and line-item inventory provides the visibility needed for contract compliance, especially in the confusing world that exists in wireless expense management. On average, Aberdeen’s respondents received bills from at least 4 carriers and received 495 wireless-related invoices per month for the usage and purchases associated with over 5,200 devices. Considering that each mobile device can have its own ocean of features, applications, and usage detail to track, companies can easily become overwhelmed by the sheer volume of line items that need to be tracked to effectively reduce costs.

In addition to these two top strategies Aberdeen saw that there were two additional approaches that varied in adoption based on the maturity of the organization: policy updates and the adoption of a BYOD strategy (Figure 2).

**Figure 2: Laggard Strategies for Wireless Expense Management**

![Bar chart showing adoption rates for different strategies](image)

**Source:** Aberdeen Group, September 2011

Laggard organizations struggling with the new influx of mobile devices and the associated cost structure of enterprise mobility are considering two key strategies: pursuing an employee-owned or BYOD strategy for devices and updating wireless expense policies to reflect the current state of wireless expenses.

The current flux in enterprise mobility forces organizations to reconsider and update their wireless expenses at an accelerated rate. As amazing as it may seem, this new era of consumerized enterprise mobility (see right inset) that has become the "new normal" in the enterprise is less than five years old. Although this pain point is especially prevalent for Laggards and Industry Average companies, all companies should reconsider their mobile expense policies on an annual basis as every year has introduced new and
significant changes to wireless expense processes ranging from device procurement to mobile application deployment to international roaming to BYOD trends.

Bring your own device, in particular, has become an increasingly prevalent approach in the enterprise and has drawn the greatest interest from Aberdeen survey respondents over the past 12 months. The logic behind this strategy is straightforward:

- Employees are more productive by using their own devices
- Companies reduce corporate costs by not paying for these devices
- Corporate IT lacks resources to support these devices

But does this logic hold true? Aberdeen finds that there are a few organizations that successfully manage all three of these trends. However, companies tend to fall short in one of two ways. First, 64% of companies using a bring your own device strategy fail to track any usage for personal devices used for work. This lack of visibility means that employees can claim expenses that may not be justified by their mobile work usage. Even more importantly, it leaves companies vulnerable to e-discovery issues when companies need to bring electronic records into court for civil lawsuits. Companies unable to archive or access these records can be held in contempt and fined because they lack this information.

Second, a majority of organizations reimburse their employees for their mobile usage. This reimbursement averages $70 per month, which is only $10 less than what Industry Average companies pay for wireless expenses. The majority of these reimbursements occurred through monthly expense reports. Considering that the typical expense report costs $29 to process, (according to Aberdeen’s March 2011 report Expense Management for a New Decade), these companies ended up spending considerably more than the typical organization and simply broke up their expenses into sub-sections that were even harder to track. To successfully enact a BYOD expense management, companies must either offer no reimbursement or only provide partial reimbursement that includes the internal cost associated with reimbursing the employee.
Aberdeen Insights — Strategy

Aberdeen’s respondents are currently supporting a wide variety of form factors and none of these forms represent a majority of devices that are being managed, on average (Table 3).

Table 3: Mobile Device Adoption

<table>
<thead>
<tr>
<th>Devices</th>
<th>Adoption Percentage (n=96)</th>
<th>% of Total Devices Managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smartphones</td>
<td>99%</td>
<td>30%</td>
</tr>
<tr>
<td>Wireless aircards</td>
<td>84%</td>
<td>19%</td>
</tr>
<tr>
<td>Feature phones (voice and text-only phones)</td>
<td>83%</td>
<td>13%</td>
</tr>
<tr>
<td>Tablets</td>
<td>80%</td>
<td>4%</td>
</tr>
<tr>
<td>Wireless routers</td>
<td>74%</td>
<td>12%</td>
</tr>
<tr>
<td>Netbooks</td>
<td>54%</td>
<td>11%</td>
</tr>
<tr>
<td>Specialized Rugged Devices</td>
<td>45%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, October 2011

The smartphone as a mobile computer has now become nearly ubiquitous in the workplace and was the most common mobile device in the enterprise as 99% of organizations surveyed had smartphones and, on average, smartphones represented 30% of the mobile devices being managed in an organization. New technologies continue to encroach on this mobile environment as 80% of respondents indicated that tablet computers are already visible in their mobile environments as well.

Interestingly, the maturity of wireless expense management was linked to the usage of mobile devices in the enterprise. At a Laggard level, smartphones and ruggedized devices made up a majority of devices supported, showing the departmental approach to mobility in these organizations. At the Industry Average level, smartphones and feature phones made up nearly three-fourths of the devices supported as organizations improved their expense management and sought to support the entire business. Finally, at the Best-in-Class level, wireless aircards and routers made up over 40% of devices managed as the enterprise supported remote employees and machine-to-machine efforts to a greater extent.

As mobility becomes increasingly ubiquitous, enterprises must maintain control of this cost center to maintain a lean and efficient enterprise.

“Our greatest challenge is with the explosive use of smartphones which opens the door to new data applications that can greatly increase our monthly costs. We don’t have good visibility into the applications that use the data - just the data itself.”

~ SVP, Technology Services

In the next chapter, we will see what the top performers are doing to achieve these gains.
Chapter Two: Benchmarking Requirements for Success

Companies that seek to effectively manage wireless expenses must accurately identify their weaknesses. Based on this analysis, they must then deploy appropriate technologies and managed services that can provide the savings associated with Aberdeen's Best-in-Class performance.

Case Study — Global Utilities Provider

A global electricity and gas organization faced challenges of managing an enterprise mobility deployment that was rapidly growing both through the organic adoption of mobility and the challenges of integrating deployments through mergers and acquisitions activity. These activities led to a deployment of over 25,000 mobile and telematic devices that needed to be managed from an inventory and cost perspective.

Initially, this management was handled in a piecemeal fashion where certain employees depended on access to specific carrier portals, others used spreadsheets, and provisioning was happening both as self-service and through IT and procurement channels. To tackle these challenges, the utilities company originally created its own wireless expense management solution. However, they discovered that the effort needed to continuously optimize an environment, the difficulty of understanding constantly changing bill formats, the accounting associated with employee chargebacks, and the staff investment needed were prohibitive.

This company put out a Request for Proposal (RFP) to identify potential solutions that could both manage expenses and integrate self-service procurement processes. This RFP was based on the organization’s needs and resulted in the selection of a cost-effective and accurate vendor that was able to provide centralized cost management and procurement.

The United States Networks Manager at this organization commented on how his organization was able to justify this effort: “Some employees were not sold into this effort, but upper management understood that wireless expenses are controllable. It may not be the biggest expense, but if we can do it right, it’s our due diligence to do it. Without upper management, our efforts to educate employees on the importance of WEM are just background noise.”

After implementing their solution and gaining full visibility, this utilities provider found that measuring the efficacy of wireless expense management was not as easy as planned. For example, the company had used cost per mobile unit, but found that this metric actually increased after optimization. Because the firm was removing zero usage devices that constituted over 10% of the mobility deployment, the cost per unit increased even though the cost per minute was reduced.

continued
Case Study — Global Utilities Provider

In addition, by taking this centralized management approach, this company also identified additional room for savings through carrier consolidation and pooling efforts. By moving all devices to a shared pool plan under a primary carrier, the firm has calculated an opportunity to reduce costs by another 10%.

Although this company has achieved 20%-plus savings through rationalized and optimized services, it has not stopped seeking additional savings. Currently, it is considering a Bring Your Own Device (BYOD) initiative, but rather than simply providing a simplistic expense report-driven approach, it is considering all of the aspects associated with BYOD: how much the company should reimburse while being cost-effective, the relative costs of expense reports vs. HR payroll deductions, fixed vs. variable reimbursement levels, Governance, Risk Management and Compliance (GRC) issues, advocacy for consumer-based expense management tools such as family plans, and the technology and service categories that should be included.

In reflecting on his experience, this network manager provided the following insight: “With the proper buy in and right controls, you can really control your wireless cost. You may be depending on carriers, but carriers don’t have the tools that you think they have. Without the right tools, you can’t control this effectively. “

“And after you get Telecom Expense Management (TEM) to a steady state, you get push back from employees and executives. But if you stop it, what’s now going to happen? You’re just going to see telecom costs increase if they’re not managed and you’re back where you started. Once you start managing these costs, you have to keep going.”

By taking a holistic perspective to wireless expense management and mobility optimization, this utilities organization has taken control of these expenses and gained the ability to strategically deploy and manage mobility assets and services.

Competitive Assessment

Aberdeen Group analyzed the aggregated metrics of surveyed companies to determine whether their performance ranked as Best-in-Class, Industry Average, or Laggard. In addition to having common performance levels, each class also shared characteristics in five key categories: (1) process (the approaches they take to execute daily operations); (2) organization (corporate focus and collaboration among stakeholders); (3) knowledge management (contextualizing data and exposing it to key stakeholders); (4) technology (the selection of the appropriate tools and the effective deployment of those tools); and (5) performance management (the ability of the organization to measure its results to improve its business).

These characteristics (identified in Table 4) serve as a guideline for best
practices, and correlate directly with Best-in-Class performance across the key metrics.

### Table 4: The Competitive Framework

<table>
<thead>
<tr>
<th>Category</th>
<th>Best-in-Class</th>
<th>Average</th>
<th>Laggards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online or email-based approval process to order new devices</td>
<td>81%</td>
<td>50%</td>
<td>48%</td>
</tr>
<tr>
<td>Scheduled inventory and billing audits</td>
<td>62%</td>
<td>50%</td>
<td>31%</td>
</tr>
<tr>
<td>Procurement executive champion for wireless expense reduction</td>
<td>57%</td>
<td>46%</td>
<td>38%</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical executive champion for wireless expense reduction</td>
<td>55%</td>
<td>44%</td>
<td>41%</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual call detail reports for mobile devices</td>
<td>55%</td>
<td>45%</td>
<td>34%</td>
</tr>
<tr>
<td>Employee receives alerts for billed usage outside of corporate policies</td>
<td>40%</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispute Management Module</td>
<td>40%</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Wireless Invoice Processing</td>
<td>45%</td>
<td>34%</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to track international roaming costs</td>
<td>80%</td>
<td>63%</td>
<td>45%</td>
</tr>
<tr>
<td>Track Service Level Agreements for wireless accounts</td>
<td>63%</td>
<td>40%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, September 2011

### Capabilities and Enablers

Based on the findings of the Competitive Framework and interviews with end users, Aberdeen's analysis of the Best-in-Class demonstrates the skills and considerations necessary to effectively reduce wireless costs in a constantly evolving enterprise mobility environment.

#### Process

To optimize wireless expenses, organizations must control the inputs that lead to high overage costs and uncontrolled spending. By controlling service orders, managing international roaming, conducting regular audits, and validating invoices on a line item basis prior to payment, Best-in-Class

"The use of tablets will introduce a secondary expense to the business. We need to ensure we see productivity gains that more than offset this additional expense."

~ VP, Business Development, Software
organizations were able to proactively reduce their bills while Laggards simply allowed the wireless expense process to go unchecked (Figure 3).

**Figure 3: Wireless Expense Processes for the Best-in-Class**

![Chart showing wireless expense processes for the Best-in-Class, Industry Average, and Laggards.](chart)

Source: Aberdeen Group, September 2011

Auditing and invoice validation are used throughout all spend categories, but the granular nature of wireless expenses requires companies to have an accurate real-time inventory, aggregated invoice information, and the ability to match line items with contracted terms. The results of these audits then can be used to right-size accounts through the reduction of assets and services and with rate plan optimization to realize ongoing savings.

Online approval processes for new devices provide several benefits to the organization. First, it provides a standardized method for employees to order devices, rate plans, and other mobility services. Second, it provides companies with a potential safeguard for unnecessary orders if the company requires either financial or managerial approval to place an order. Third, orders placed through a portal or through email can be archived and provide documentation if the order is not provided as planned. Finally, this record can also serve as the basis to manage the device and its related services through a lifecycle approach. By knowing when and how the device was first used in the organization, the company can be more proactive in understanding how devices and services are associated with the success of an enterprise mobility deployment.

**Organization - Seeking a Coterie of Champions**

Although wireless expenses represent a small percentage of revenues, the complexity of wireless expenses and the strategic importance of enterprise mobility to the firm often lead to an environment where companies have multiple stakeholders for mobility. Because the responsibility for mobility can be scattered and wireless expenses are often enterprise-wide in nature,
Aberdeen respondents saw greater success by having multiple champions in finance, procurement, and/or technical areas (Figure 4).

**Figure 4: Champions of Wireless Expense Management**

![Bar chart showing champions of wireless expense management](chart.png)

<table>
<thead>
<tr>
<th>Category</th>
<th>Best-in-Class</th>
<th>Industry Average</th>
<th>Laggards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement executive champion for WEM</td>
<td>57%</td>
<td>38%</td>
<td>40%</td>
</tr>
<tr>
<td>reduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical executive champion for WEM</td>
<td>55%</td>
<td>44%</td>
<td>41%</td>
</tr>
<tr>
<td>reduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial executive champion for WEM</td>
<td>52%</td>
<td>39%</td>
<td>32%</td>
</tr>
<tr>
<td>reduction</td>
<td>Best-in-Class</td>
<td>Industry Average</td>
<td>Laggards</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, September 2011

This observation is not meant to infer that it is easy to get this team of cross-departmental executives to support a wireless expense management effort. However, Best-in-Class companies were over 60% more likely to have a financial champion and 50% more likely to have a procurement-based or purchasing executive that supported this effort. Just as the effective use of enterprise mobility requires a cross-departmental effort, effective wireless cost reduction requires multiple stakeholders as well.

**Knowledge Management**

Best-in-Class wireless expense management requires the ability to track costs at a granular level and based on multiple levels of categorization. For instance, a majority of Industry Average organizations provide departmental chargebacks for wireless expenses and can track their international roaming costs to further analyze this spend category.

However, when organizations focus on the data management and analysis needed to optimize wireless expenses, they often leave out one important stakeholder: the actual employee using the mobile device. Without visibility to the costs associated with their behavior, employees have little to no awareness of how their current usage patterns affect corporate cost centers. Best-in-Class companies have come to this conclusion to a greater extent than the rest of their counterparts and are twice as likely as Laggards to both provide employees with alerts for usage that falls outside of corporate standards and to actively seek employee recommendations to reduce wireless expenses.
Technology

There are two separate technology categories that businesses should consider when they are reducing wireless expenses. First, they should consider the technologies and databases used to manage wireless expenses. Although the automation of wireless expenses throughout the wireless lifecycle can lead to greater efficiencies, there are three specific tools that differentiated Best-in-Class organizations to a greater extent than all other technologies: invoice processing, dispute management, and rate plan optimization (Figure 5).

Figure 5: Best-in-Class Wireless Expense Management Tech

![](chart.png)

Source: Aberdeen Group, September 2011

Invoice processing is a simple value proposition, but for organizations that have several hundred invoices per month, this task can potentially become a full-time job. By shifting this responsibility to a service that converts and analyzes the invoice on the company’s behalf, organizations can use their own employees for more important tasks.

The concept of rate plan optimization is simple enough in theory: move each end user to the correct plan or move everyone into a pooled minutes plan. However, in reality, there are plans for several types of usage: voice, data, and text messaging. In addition, there is typically a marginal limit of usage where it is not cost effective to add an employee to a pooled plan, especially for high volume users. These plans typically do not include international long distance or usage, which require separate plans. And all of these usage patterns need to be analyzed on a month-to-month basis to be effective. Given all of these variables, Best-in-Class companies were 66% more likely than all other companies to wash their hands of the problem and use a rate plan optimization module or solution.

Dispute management requires a case-based approach to effectively deal with the many errors that exist. Forty-eight percent (48%) of Aberdeen’s respondents indicated that they had errors on one or more bills every...
month and 10% indicated that over a quarter of their bills had errors. By using a formal dispute management solution for each dispute, organizations can follow up with each bill issue and ensure that they actually realize the savings that they detect. This technology is especially useful as companies improve their expense management capabilities since Best-in-Class companies typically discovered billing errors that were 3.7 times larger than their Laggard counterparts.

**Performance Management**

In past years, Aberdeen has found that the cost of Best-in-Class wireless expense management was that organizations had to devote more time and effort into their solutions. However, our latest findings show that Best-in-Class companies no longer need to make this sacrifice. Aberdeen discovered a maturity pattern where Laggards start by only dedicating one employee per every 2,000 handheld mobile devices (including cell phones, smartphones, and tablets), but do a poor job of managing their costs. Once this approach becomes untenable, Industry Average companies throw people at this problem until they are devoting about one employee for every 500 devices. Eventually, this labor-based approach also becomes too difficult to scale and businesses move to a Best-in-Class centralized and automated approach that reduces the labor burden to approximately one employee for every 1,600 handheld mobile devices.

What was the cost of these solutions? For solutions that were charged on a monthly or operational expense basis, there was little correlation between cost and quality. Laggards tended to average around $4 per device, Industry Average companies averaged around $5 per device, and Best-in-Class companies came down to $4.50 per device. Rather than focus on price, it was more important for organizations to choose solutions based on what was most appropriate for their particular environment. Compare this to the results associated with each of these three categories (Table 5).

<table>
<thead>
<tr>
<th>Maturity Class</th>
<th>Mean Class Performance</th>
<th>WEM Solution Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best-in-Class: Top 20%</td>
<td>$58 per user per month</td>
<td>$4.50 per user per month</td>
</tr>
<tr>
<td>Industry Average: Middle 50%</td>
<td>$80 per user per month</td>
<td>$5.27 per user per month</td>
</tr>
<tr>
<td>Laggard: Bottom 30%</td>
<td>$96 per user per month</td>
<td>$4.19 per user per month</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, September 2011

Companies that are serious about reducing wireless expenses should choose the solution that is most aligned to their needs, whether this means a managed service solution, software integration with financial software,
One of the most common arguments for wireless expense management is in discussing whether an organization should pursue a managed solution or maintain its in-house approach to managing these costs. To better understand the success associated with each approach, Aberdeen compared organizations that were using a managed services (defined as SaaS, managed services, or BPO) solution to those using manual solutions (defined as accounts payable flow through or manual invoice processing). Aberdeen discovered a significant difference in performance both in cost and labor (Figure 6).

The ~$10 per month difference between managed and manual solutions may be expected, given the typical vendor promises of saving 10% or more. However, more surprising was that manual processes actually cost more than managed expense management services on a per user per month basis. The reason for this was that manual solutions averaged 0.7 employees per 1,000 users to manage expenses while managed solutions averaged 0.3 employees per 1,000 users. The cost of manual labor and processing ended up outweighing the cost associated with a managed services or outsourcing approach.
Chapter Three: Required Actions

Whether a company is trying to move its performance in wireless expense management from Laggard to Industry Average, or Industry Average to Best-in-Class, the following actions will help spur the necessary performance improvements:

Laggard Steps to Success

Laggards have put few resources into wireless expense management and have paid the price by paying 20% more than their Industry Average peers for their mobile services. Although they are seeking to simply avoid the responsibility associated with wireless expenses, their results indicate that they need to take a more active role in managing these costs for the good of their bottom line. To start controlling these expenses, Aberdeen makes the following recommendations for Laggards:

- **Track both voice and data costs.** Currently, only 53% of Laggard organizations are able to track both data and voice costs. By gaining this level of visibility, Laggards can start to learn where they are underperforming and change their purchasing and support behaviors accordingly. Voice-based underperformance may simply require a rate plan optimization while data-based underperformance may require training or a device management solution to control data usage more strictly.

- **Develop an online approval process for orders that can be tracked.** Fifty-two percent (52%) of Laggards currently have a manual or paper-based process for placing mobile orders. This lack of automation prevents organizations from fully tracking devices and the services that accompany them. By creating an electronic record that tracks the initial order and serves as an anchor for future orders and activities, companies can better track expenses throughout the life of the device.

- **Increase managerial and executive visibility into wireless expenses.** Wireless expense information should not be limited to the operational department held responsible for tracking these charges. Because wireless expenses tend to exist throughout the organization, wireless expense management is aided by an executive champion who can reach across departments and serve as both an example and a viable threat to enforce wireless expense behavior. Fifty-two percent (52%) of Laggard organizations currently lack a financial, technical, or procurement-based champion to help enforce policies to reduce wireless expenses.
Industry Average Steps to Success

Industry Average organizations have achieved some level of success in managing their voice costs, but are challenged to control data and international roaming costs associated with their enterprise mobility deployments. To achieve the additional 28% reduction in costs that Best-in-Class companies have achieved, Aberdeen suggests starting with the following steps:

- **Transfer employee-owned mobile devices to corporate ownership.** Although it is possible to reduce the total cost of ownership associated with enterprise mobility through employee-owned devices, this success typically requires companies to stop reimbursing employees completely for their device usage. If your organization is not taking this approach for employee-owned devices, it is likely to be spending more for enterprise mobility than is necessary and simply shuffling the costs between IT, accounts payable, and human resources. To reduce the bottom line associated with mobility, most companies are better off taking advantage of their economies of scale and corporate clout to reduce wireless expenses.

- **Increase employee visibility to non-compliant usage.** To improve wireless expense practices, the end-user employee should also have timely visibility into non-compliant usage. If the employee never sees the problem, then the company will continue to either receive non-compliant usage or will be forced to take additional steps to proactively block or alter employee behavior. Why not just tell the employee that they’ve done something that is out of policy? Typically, the biggest problem is simply that the wireless expense administrator also does not know about the non-compliant usage, either. Industry Average companies need to develop reports to detect non-compliant usage from the invoice or, preferably, from the device on a real-time basis through real-time wireless expense management.

- **Consider outsourcing non-core help desk and management capabilities.** Most companies do not consider mobile support to be core to their business mission. Unless bill processing, usage management, device management, and mobile troubleshooting are important aspects of the core business, companies should consider the cost structure of outsourcing some of these mobile functions. Best-in-Class companies were over 60% more likely to have outsourced inventory management, order management, and help desk resources than their Industry Average counterparts, which demonstrated that this outsourcing was not typically associated with increased costs.

---

**Insight - Wireless Bill Validation**

**Validate and dispute bills on time.** As simple as this concept may seem, only 28% of Industry Average companies are able to validate and dispute wireless bills within the billing cycle because of the complexity and length of wireless invoices. Those who have dealt with multi-thousand page bills (in EDI, CD, or paper form) that make up the corporate wireless expense bill understand why these disputes take place. Those who have not done so should understand that the inscrutability of these invoices often allows large errors to hide for months or years without ever being detected. Without the automation associated with electronic billing and auditing, companies with over 500 devices will struggle to accurately dispute bills on a regular basis.
Best-in-Class Steps to Success

Best-in-Class organizations have successfully optimized both voice and data costs. For them to continue their success, they must expand their view of enterprise mobility from endpoints and usage to include the entire ecosystem, including applications and WLAN. To continue their success in reducing wireless expenses, Aberdeen provides the following insights:

- **Move from a reactive monthly approach to a proactive real-time approach.** Given the sudden ability to incur hundreds or even thousands of dollars in overage and roaming costs in a matter of hours, companies should seek more proactive visibility into any usage that can potentially ruin a monthly budget. Currently, only 20% of Best-in-Class companies have these real-time alerts in place that allow organizations to quickly respond to high-risk usage, though another 30% of Best-in-Class companies plan to implement this technology over the next 12 months. Since Aberdeen had multiple respondents that incurred charges of over $5,000 from a single device on a single overseas trip, Best-in-Class companies susceptible to this potential risk should consider the usage of a real-time expense management solution.

- **Integrate wireless expense management with telecom, network, and technology expense efforts.** Wireless expense management information should not exist in a silo, but should be part of a greater expense management solution that includes telecom, network, and other technology spend topics. Although wireless represents the most complicated of these spend topics at this time, many of the usage issues currently associated with mobile devices will become increasingly important to technology as a whole as subscription and usage-based billing become increasingly common for software and services billing. Companies that have already integrated wireless expense management into a larger effort will be able to transfer these lessons to other spend categories more quickly than those who have siloed their wireless expense management efforts.

- **Support new technology efforts that will further reduce wireless costs, such as voice over IP and fixed mobile convergence.** Best-in-Class companies are approaching the ceiling of improvement that they can achieve through sourcing and procurement optimization. To further cut costs, they must use technologies such as softphone clients and fixed mobile convergence to take calls off the cellular network and take advantage of existing LAN and WAN resources. Currently, only 15% of Best-in-Class companies use fixed mobile convergence and only 25% of Best-in-Class companies use softphones to reduce wireless expenses.
In today’s economy, every company has some multinational or global visibility which requires them to consider the cost of global mobility (reflected in the portmanteau of Globility). As a result, it is no surprise that the international roaming and usage of mobile devices was a key focus in Aberdeen’s community. Although this may seem to be a sub-topic of wireless expense management, Aberdeen actually sees this as the next great battle zone for reducing costs.

Aberdeen asked 54 organizations about their costs associated with international roaming. On average, they identified 14% of employees as having international usage and the average cost of each trip was $420. In other words, these companies, on average, were adding an additional $60 per employee per month. Unless your organization is planning on becoming less global and less connected, this should be a concern.

There are several approaches that can provide some relief to this problem, which have already been discussed in the Best-in-Class recommendations. Although all of those recommendations are true for an overall expense management strategy, they are especially important for managing Globility.

Real-time expense management can allow companies to identify non-compliant or costly international usage as it happens and provide a chance to modify usage patterns or choose an alternate communications method which is cheaper. Integrated wireless expense management with other technology spend can provide companies with visibility into how international wireless spend is growing compared to other technology categories. As companies discover that this may be the fastest growing category out of all tech spend, it can gain greater visibility for line-of-business and executive mindshare. In addition, the adoption of new technologies can offload expensive international roaming calls onto cheaper backhaul networks that your organization already supports.

As your organization prioritizes its wireless expense efforts, it must not just consider whether to focus on expense categories such as voice, data, or devices. It must also consider the importance of international roaming as a current or future contributor to wireless expenses.
Appendix A: Research Methodology

Between August and September of 2011, Aberdeen examined the use, the experiences, and the intentions of 119 enterprises managing wireless expenses in a diverse set of enterprises.

Aberdeen supplemented this online survey effort with telephone interviews with select survey respondents, gathering additional information on wireless expense management strategies, experiences, and results.

Responding enterprises included the following:

- **Job title**: The research sample included respondents with the following job titles: CEO / President (12%); CFO (1%); CIO (1%); EVP/SVP/VP (12%); General Manager (8%); Director (17%); Manager (28%); Staff (9%); Consultant (10%); and Other (2%).
- **Department / function**: The research sample included respondents from the following departments or functions: IT manager or staff (41%); Procurement/purchasing manager (16%); Business Development/Sales management (11%); Operations management (6%); Other (26%).
- **Industry**: The research sample included respondents from varied industries including the following: IT Services (29%); Software (15%); Telecommunications services (12%); Financial Services (8%); Health/medical/dental devices (4%); Telecommunications equipment (4%); Other (28%).
- **Geography**: The majority of respondents (65%) were headquartered in North America. Remaining respondents were headquartered in Europe (25%), the Asia-Pacific region (7%) and Latin America (3%).
- **Company size**: Thirty-eight percent (38%) of respondents were from large enterprises (annual revenues above US $1 billion); 29% were from midsize enterprises (annual revenues between $50 million and $1 billion); and 33% of respondents were from small businesses (annual revenues of $50 million or less).
- **Headcount**: Fifty-three percent (53%) of respondents were from large enterprises (headcount greater than 1,000 employees); 17% were from midsize enterprises (headcount between 101 and 1,000 employees); and 30% of respondents were from small businesses (headcount between 1 and 100 employees).

Study Focus

Responding executives completed an online survey that included questions designed to determine the following:

- The degree to which wireless expenses are tracked in their operations and the financial implications of their approach
- The strategies and effectiveness of existing wireless expense management implementations
- Current and planned use of wireless expense management
- The benefits, if any, that have been derived from wireless expense management initiatives

The study aimed to identify emerging best practices for wireless expense management and to provide a framework by which readers could assess their own management capabilities.
### Table 6: The PACE Framework Key

<table>
<thead>
<tr>
<th>Overview</th>
</tr>
</thead>
</table>

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:

- **Pressures** — external forces that impact an organization’s market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)
- **Actions** — 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)
- **Capabilities** — the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products / services, ecosystem partners, financing)
- **Enablers** — 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: Aberdeen Group, October 2011

### Table 7: The Competitive Framework Key

<table>
<thead>
<tr>
<th>Overview</th>
</tr>
</thead>
</table>

The Aberdeen Competitive Framework defines enterprises as falling into one of the following three levels of practices and performance:

- **Best-in-Class (20%)** — Practices that are the best currently being employed and are significantly superior to the Industry Average, and result in the top industry performance.
- **Industry Average (50%)** — Practices that represent the average or norm, and result in average industry performance.
- **Laggards (30%)** — Practices that are significantly behind the average of the industry, and result in below average performance.

In the following categories:

- **Process** — What is the scope of process standardization? What is the efficiency and effectiveness of this process?
- **Organization** — How is your company currently organized to manage and optimize this particular process?
- **Knowledge** — What visibility do you have into key data and intelligence required to manage this process?
- **Technology** — What level of automation have you used to support this process? How is this automation integrated and aligned?
- **Performance** — What do you measure? How frequently? What’s your actual performance?

Source: Aberdeen Group, October 2011

### Table 8: The Relationship Between PACE and the Competitive Framework

<table>
<thead>
<tr>
<th>PACE and the Competitive Framework – How They Interact</th>
</tr>
</thead>
</table>

Aberdeen research indicates that companies that identify the most influential 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 those decisions.

Source: Aberdeen Group, October 2011
Appendix B:
Related Aberdeen Research

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

- **Enterprise Mobility Management Goes Global: Mobility Becomes Core IT**; July 2011
- **Enterprise-Grade Mobile Apps Go Global: Secure Info When and Where It’s Needed**; July 2011
- **Conquering the Fear, Uncertainty, and Doubt of Managing Integrated Communications**; July 2011
- **Prepare Your WLAN for the BYOD Invasion**; July 2011
- **10 Ways to Improve Your Telecom Lifecycle Management**; March 2011
- **Improve Efficiency and Reduce Costs by Automating Mobility Management**; February 2011
- **Controlling Wireless Expenses**; September 2010
- **Recovering with Telecom Lifecycle Management**; February 2010
- **Enterprise Mobile Strategies 2010: More Mobility, Same Budget**; January 2010
- **Quick Fixes to Cut Telecom Costs**; November 2009
- **Wireless Expense Management: Controlling the Invasion of Personal Cell Phones**; October 2009
- **Global Telecom Lifecycle Management: Cost-Cutting Solutions for Europe, Asia Pacific, and the Rest of the World**; July 2009

Information on these and any other Aberdeen publications can be found at www.aberdeen.com.

Author: Hyoun Park, Research Analyst, Collaboration and Integrated Communications (hyoun.park@aberdeen.com)

For more than two decades, Aberdeen's research has been helping corporations worldwide become Best-in-Class. Having benchmarked the performance of more than 644,000 companies, Aberdeen is uniquely positioned to provide organizations with the facts that matter — the facts that enable companies to get ahead and drive results. That's why our research is relied on by more than 2.5 million readers in over 40 countries, 90% of the Fortune 1,000, and 93% of the Technology 500.

As a Harte-Hanks Company, Aberdeen's research provides insight and analysis to the Harte-Hanks community of local, regional, national and international marketing executives. Combined, we help our customers leverage the power of insight to deliver innovative multichannel marketing programs that drive business-changing results. For additional information, visit Aberdeen http://www.aberdeen.com or call (617) 854-5200, or to learn more about Harte-Hanks, call (800) 456-9748 or go to http://www.harte-hanks.com.

This document is the result of primary research performed by Aberdeen Group. Aberdeen Group's methodologies provide for objective fact-based research and represent the best analysis available at the time of publication. Unless otherwise noted, the entire contents of this publication are copyrighted by Aberdeen Group, Inc. and may not be reproduced, distributed, archived, or transmitted in any form or by any means without prior written consent by Aberdeen Group, Inc. (2011a)