Analyst Insight

Aberdeen Group
A Harte-Hanks Company

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Enterprise-Grade BYOD Strategies: Flexible, Compliant, Secure

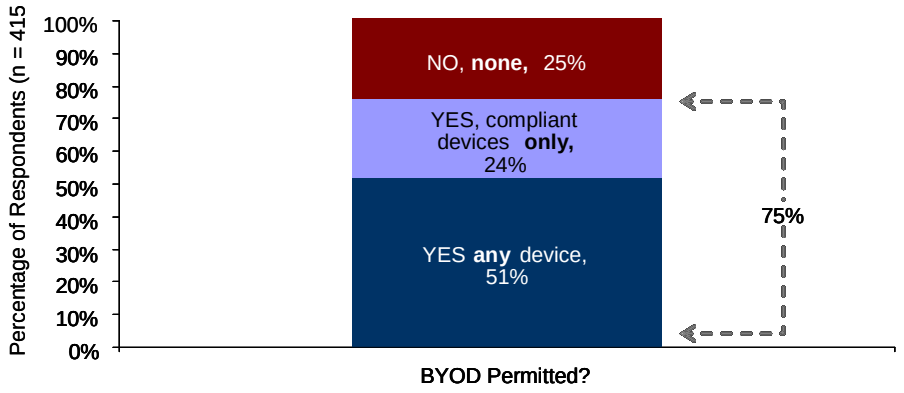
Since 2008, Aberdeen research has been tracking a radical transformation taking place in the enterprise: an increasing number of organizations are permitting, even encouraging employees to bring their own mobile devices into the workplace to be used for work purposes. While at first appearing to radically lower the cost of enterprise mobility while making its productivity and communications advantages available to a much broader group of employees; it also introduces new risks and may actually significantly increase costs if not properly managed.

The Bring-Your-Own-Device (BYOD) Invasion

In the December 2008 study *Mobility Management: Does Outsourcing Make Sense?*, Aberdeen reported a four-fold year-over-year increase in the percentage of organizations with mobile devices purchased by employees that are used for work purposes. These devices are typically called Employee-Liable (E-L) or Bring-Your-Own-Device (BYOD). This early research finding presaged a fundamental shift in how mobile devices were being procured, paid for, managed, and supported.

Although initially appearing first in North American research, this phenomenon has manifested in other regions around the globe. The July 2011 study *Enterprise Mobility Management Goes Global: Mobility Becomes Core IT* found that 75% of organizations were permitting the use of E-L devices for business purposes (Figure 1).

Figure 1: Personal Mobile Devices for Business Use



Source: Aberdeen Group, July 2011

Of the total, 51% stated that they were permitting any employee device to gain access to corporate network and email, a practice rife with the

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Aberdeen's Insights provide the analyst perspective of the research as drawn from an aggregated view of the research surveys, interviews, and data analysis

Why BYOD?

The BYOD phenomenon has momentum in part because it simultaneously meets the needs of both the organization and its employees to more broadly propagate mobility and its benefits:

- √ **For the organization:** it provides an opportunity to reduce the cost of mobility overall by transferring equipment costs to employees, significantly decreasing capital expense budgets. Although it does tend to increase the complexity of the mobile infrastructure, if managed properly, it can be accomplished without a significant increase in the operational budgets for technical support and mobility management.
- √ **For employees:** although it's undeniable that mobility has a tendency to extend the work day into what would otherwise be personal time, it also gives back to the employee the control as to when and where that incursion takes place. In addition, it enables the interleaving of their personal / social life back into the workplace as appropriate, offering the potential for a healthier work/life balance.

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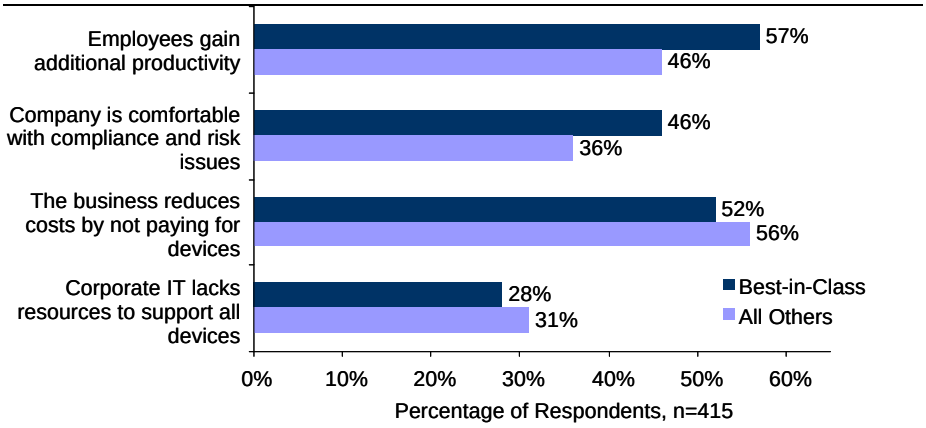
potential for data security violations (see the BYOD Risk or Reward sidebar on the next page), and not recommended by Aberdeen. Twenty-four percent (24%) indicated that they require all employee-liable devices to comply with company policy before permitting them corporate access, a recommended best practice. Although methods for enforcing that compliance vary from organization to organization, the study documented the practices of the top performers identified as Best-in-Class (see sidebar).

As seen in Figure 2, the business drivers for enabling BYOD differs between the Best-in-Class and all other respondents (Industry Average and Laggards combined). The Best-in-Class are motivated by the productivity gains made possible by the broader deployment of mobility throughout the organization, which BYOD phenomenon enables.

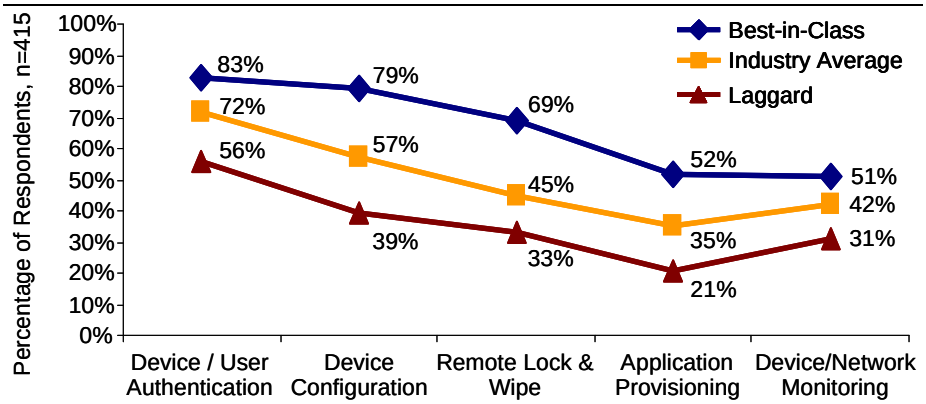
Figure 2: BYOD Drivers



Source: Aberdeen Group, July 2011

They are also more comfortable with compliance and risk issues, since they are much more likely to manage their entire mobile ecosystem using the best practices of Enterprise Mobility Management (EMM) (Figure 3).

Figure 3: Essential EMM



Source: Aberdeen Group, July 2011

The Best-in-Class also recognize that EMM best practices don't begin and end with the device; they include user, application, and network

Aberdeen's Maturity Class

In the July 2011 report *Enterprise Mobility Management Goes Global: Mobility Becomes Core IT*, Aberdeen used three key performance criteria to distinguish the Best-in-Class from Industry Average and Laggard organizations:

- The percentage of employees that have secure remote mobile access to the company network
- The percentage of lost or stolen mobile devices never successfully recovered or decommissioned
- The change in the respondent's speed of decision-making over the prior 12 months

Best-in-Class: top 20% of all performers

Industry Average: middle 50% of performers

Laggards: lower 30% of performers

management throughout the entire mobile lifecycle. For more details on EMM, refer to the July 2011 report, *Enterprise Mobility Management Goes Global: Mobility Becomes Core IT*.

By contrast, Figure 2 reveals that all other respondents are motivated by different factors. They are more likely to take a short-term approach, looking at a reduction in capital expenditure as the primary driver, with a frank admission that they lack the IT resource to properly support all mobile devices. The problem with this short-term approach is that instead of reducing overall cost, it may drive the mobility Total Cost of Ownership (TCO) higher. For example, it may result in disaggregated carrier billing which leads to un-manageable telecomm expenses. Support costs may also rise due to a poorly-designed and non-compliant mobile infrastructure.

Recommended Actions

In order to prepare for the BYOD invasion, Aberdeen recommends that IT take the following actions:

- **Start with Mobile Device Management** (MDM). Only 23% of Laggards centrally manage their mobile devices Over-the-Air (OTA). OTA MDM is a basic capability of most EMM solutions, and is a crucial first step in establishing IT control over the mobile ecosystem. Choose an MDM solution designed to grow into a full EMM solution when your organization is ready for it.
- **Secure the tablets.** In their apparent rush to deliver on the productivity promise of tablets, 75% of the Best-in-Class have deployed them without the most basic security measures in place, such as lock and wipe of lost or stolen tablets. Apply to tablets the same rigor and IT service management principles that are used to support netbooks and smartphones.
- **Put IT back in charge**. If your organization hasn't already done so, the time has come to consolidate all of its mobility initiatives under the watchful and process-oriented eye of IT. Best-in-Class organizations have taken the lead in integrating their EMM efforts under IT Service Management (ITSM) principles, part of the global movement towards IT practice standardization.
- **Ensure that policy is in place and compliance is enforced**. It's not enough to develop a thorough IT policy on E-L devices – that policy must be communicated and enforced. For example, to allow only certain types of mobile platforms, while barring others. These activities should be automated whenever possible. Best-in-Class companies are only 25% more likely than Laggards to have a security policy in place, but 96% more likely than Laggards to enforce this policy for enterprise data on employee-owned devices.
- **Create and maintain an up-to-date device inventory**. Fingerprint device types, as well as individual devices and users to gain full visibility and control of the devices attempting to connect to the network. Sixty-seven percent (67%) of the Best-in-Class

BYOD: Risk or Reward?

The financial rewards of a well-implemented BYOD strategy are relatively straightforward: a lower initial capital expenditure, balanced by potentially higher operational costs, as supporting a myriad of employee-owned devices is inherently more complex than a limited and controlled subset of corporate-procured devices.

Often overlooked, however, is the increased risk of financial exposure due to unauthorized access to protected data stored on mobile devices that are lost or stolen. In the July 2011 study *Enterprise Mobility Management Goes Global: Mobility Becomes Core IT*, respondents were asked to identify the maximum financial exposure to their organization caused by a lapse in compliance with local statutes and regulations caused by lost or stolen mobile devices.

At the low end of the risk spectrum, the exposure was **$3,010** USD per lapse; at the high end, **$179,270** USD per lapse. And a single compromised device can contain multiple compliance lapses. How can organizations *not* address the security and compliance of all of their employee-liable mobile devices?

maintain an inventory of all mobile devices with network access, as opposed to only 38% of Laggards.

- **Plan for multiple smart devices per user**. The typical business user now has more than one mobile device assigned to him or her (e.g. laptop, smartphone, and or tablet). EMM solutions which assume one unique device per user, such as those solely based on ActiveSync email addresses for example, may well prove inadequate. Procure adequate network resources such as IP addresses, authentication, and network bandwidth; pool these resources wherever possible. Best-in-Class companies are 70% more likely than Laggards to track the number of devices managed under EMM, making it easier for them to monitor and manage the number of mobile devices per user.
- **Evolve to Enterprise Mobility Management (EMM**). MDM focuses on mobile device management, which is a good place to start; but it is not as comprehensive as the full mobile lifecycle approach of EMM, which also focuses on mobile data and access management. For more information on EMM, refer to *Enterprise Mobility Management Goes Global: Mobility Becomes Core IT*.
- **Compare your organization's performance** to your peers and the Best-in-Class, and receive a personalized performance scorecard by taking this brief online assessment tool: *http://assessment.aberdeen.com/3kOdV7b14x/index.aspx*

By taking the steps describe above, IT organizations can cost-effectively manage their mobile ecosystem, while simultaneously supporting business drivers underlying the BYOD phenomenon. This will also serve to foster the visibility, influence, and ultimately the perceived value of the IT function itself. For more information on this or other research topics, please visit www.aberdeen.com.

Related Research	
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 *Opposites Attract: the Mobile Channel Unites Marketing and IT*; June 2011	*On-Premises Mobile Retail: Empowering Deeper Customer Engagement*; November 2010 *A Busy Spring in Mobile City: Mobility Moves from Enterprise Periphery to Core IT*, May 2010
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