Building A Next-Generation Enterprise Mobility Strategy Requires Client-Aware Cloud Capabilities

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Executive Summary

Over the next 10 years, three sets of forces will change the relationship of business, technology, and the IT organization. Technologies that are increasingly easy to acquire and use will empower business self-sufficiency. Tech-savvy business managers and staff will provision their own technology solutions. Huge changes in the business landscape will up the ante for speed and agility. The IT status quo will collapse under these forces, and a new model will take its place — empowered business technology (BT). Forrester Consulting recently completed an online survey of 150 IT decision-makers at North American enterprises, commissioned by Dell and Intel, concerning their mobility, data center, and cloud strategies. Today’s IT and business leaders should prepare by rethinking the role the IT department plays and how technology staff engage the business, shifting from controlling to teaching and guiding.

Key Findings

Forrester’s study yielded four key findings:

- **IT decision-makers are feeling consumerization and service automation pressures from the business.** Social media networks and application-capable smartphones and tablets are finding favor among information workers who discover them in their personal lives and increasingly use them for work. As these services increase in capability and ubiquity, they form the new workflows for business transactions, reporting, and IP creation and are often procured outside of the IT purview.

- **IT managers are embracing cloud-hosted applications, infrastructure, and managed services.** With everyone’s budgets under siege, IT executives scramble to increase productivity and drive change faster in light of the new economic realities. In the future, they will choose cloud and SaaS options that were completely off their radar just 18 to 24 months ago. Spending on these services is forecasted to grow from approximately $28 billion today to $258 billion in 2020 — reaching 45% of total IT services spend. The appeal of per-use pricing, faster time-to-productivity, and rapid feature enhancement highly differentiate these services from the IT status quo.

- **IT is facing new challenges in mobilizing its workforce without sacrificing data security.** Smartphones, tablets, and the rise of bring-your-own devices (BYOD) have put tremendous pressure on IT to revamp and rethink its mobile strategy: everything from procurement and development to security and app stores. In this new era, applications must dynamically adapt based on context and take advantage of capabilities of endpoint devices.

- **IT leaders will need to focus on the people and process implications just as much as the technology.** Your employees and the business no longer rely solely on IT to provision and deliver technology. They are using technologies like social, mobile, cloud, and video to bypass IT. Your customers expect on-demand information, customized user experiences, and mobile apps. Your data center functions are being outsourced to gain cost efficiencies. All this can sound dismal for the IT organization. Some have reacted by vigorously defending their turf from these encroachments; others are more optimistic about the future of their role but concede that they will have less control over their technology environment. These changes bring a unique opportunity to step up and lead their technology organizations into the world of
empowered BT. They can do this by taking a three-pronged strategy of developing people and processes to support a new governance paradigm, embracing disruptive technologies that fuel business innovation, and partnering with the business to drive growth and customer engagement.

**IT Looks To Build Its Next-Generation Enterprise Mobility Strategy**

With the devices and applications landscape evolving so rapidly in the face of consumerization and automation pressures, IT managers are building their next-generation enterprise mobility strategies with the following trends in mind:

- **Devices and cloud applications are entering the workforce through the consumer door.** Consumerization — employees using devices, applications, and web services without permission — is a threat to the status quo and a risk to the security of the firm. But it’s also a key driver of employee-led, groundswell innovation. Highly empowered and resourceful operatives (HEROes) — those who feel empowered to solve problems and act resourcefully with technology to do so — are the innovators, advocates, and leaders in your organization. You will find HEROes everywhere in your firm, but especially in your sales, marketing, and leadership ranks. The good news is that technology plays a big role in empowering employees to innovate. Collaboration tools help employees connect to solve problems and create breakthrough solutions. Mobile devices help them to be productive from anywhere. And the permission to use consumer technology (where appropriate) helps to improve the way they work. Provide those tools and the climate to use them to create a HERO-powered business.

- **Employees are more aware of and expect more control over the technology they use for work.** Employees master technology at home and have ideas on how to use it at work. They already know what it’s good for. Empowered employees implement those ideas at work. With the right support and permissions, employees can turn their ideas into reality. They can implement the technology on their own. They can’t only imagine; they can also act. Many ideas will fail, but some ideas will improve how people get work done, and a few ideas will lead to breakthrough solutions.

- **IT is struggling to guide these new devices without compromising management and security.** To implement your enterprise mobile strategy, IT professionals must invest in a mobile management solution or managed service. This essential technology allows IT to support multiple platforms and form factors, extend management and security policies to both corporate-labile and employee-owned devices, and automate service desk support. This is especially important as IT develops BYOD programs to support the business needs and high expectations of their empowered workers.

- **Applications and the explosion of data are at the intersection point for cloud and mobile initiatives.** As firms develop and procure applications for their mobile workforce, IT managers are increasingly identifying the need for an enterprise-class application store (see Figure 1). IT envisions this portal hosting applications (e.g., physical, virtual, and web-based) and data (e.g., user documents) that employees can access across a broad spectrum of mobile devices and platforms. These must also support asset and software management, chargeback, service desk, and request fulfillment capabilities.
• **IT is increasingly investing in cloud and mobility as service delivery models over the next 12 to 18 months.**
IT managers now have a choice between investing in on-premise or cloud-hosted solutions and managed services. Enterprises often find that the latter has proven increasingly compelling for firms that lack internal expertise or budget, or that have determined that managing an on-premises solution takes too long to deploy and configure, or that simply feel that mobile management isn’t strategic enough for their limited IT resources to take on. Regardless of deployment model, by embracing these solutions today, firms can set down the path of becoming device-independent while also leaving room for emerging platforms and form factors.

**Figure 1**
Mobile Applications Are Proliferating From Multiple Internal And External Sources

```
“How does your firm acquire/develop mobile applications for mobile devices, excluding laptops?”

- Homegrown and/or developed in-house: 52%
- Purchase mobile apps from an application store: 33%
- Custom apps developed by a local/regional/national external developer: 33%
- Use a mobile extension of an existing packaged app from the vendor: 32%
- Purchase via a mobile service provider portal site: 23%
- Work with a local, regional, or national system integrator to develop mobile apps: 14%
- Develop mobile apps on a purchased mobile middleware platform: 13%
- Custom apps developed by an offshore application developer: 12%
- Work with a website design firm to develop mobile apps: 11%
- Other (please specify): 7%
- Don’t know: 3%
```

Base: 150 IT decision-makers at North American enterprises
Source: A commissioned study conducted by Forrester Consulting on behalf of Dell and Intel, November 2011

**IT Embraces Cloud-Hosted Applications, Infrastructure, And Services**

While cloud computing is still in the early adopter phase for most enterprises, you’re likely under executive pressure to develop a cloud strategy. And it’s up to you to sort through the cloud washing and not only understand the basic economics and capabilities but also the security risks involved. And if that isn’t challenging enough, it seems your developers are circumventing IT and going to the public cloud without thoroughly vetting solutions.
• **New apps, efficient remote access, and quick deployments drive firms to question on-premises architectures.** As the global economy limps along in a slow and uncertain recovery, enterprises continue to focus on ways to react quickly to changing customer demands and deliver new services at the speed of market changes. And all companies are under pressure to accomplish these aims at ever-lower costs. A key vehicle in achieving this objective is to leverage public cloud computing services that provide preconfigured environments and solutions that business owners and IT can readily leverage.

• **Firms are increasing investments in cloud-hosted and managed applications and infrastructure services.** This economic model makes infrastructure-as-a-service (IaaS) platforms ideal for highly elastic and transient (used only during finite periods) applications (see Figure 2). Thus, workloads such as websites, service-oriented architecture (SOA) services, high-performance computing (HPC), and real-time business analysis programs are often an ideal fit. As many of these applications are used in the creation, promotion, and delivery of new services and in swiftly and flexibly adapting your business to market changes, IaaS platforms are proving very popular with forward-looking business units and enterprise divisions. In addition, given the self-service nature of these services, they enable skilled developers to work autonomous of corporate IT teams.

• **Capex savings and slimmer staffing ratios are driving increased interest and adoption.** The common response to the IaaS threat is for IT professionals to pledge to create competing offerings — private clouds in most cases — that attempt to mimic the values of public IaaS platforms. However, private clouds can rarely adequately deliver the developer autonomy and economics of public clouds. This doesn’t mean you should stop your efforts to deliver a private cloud. There’s high value to the entire enterprise in bringing greater efficiency and automation into the corporate data center, but it’s foolhardy to think this effort can fully meet the values that public IaaS platforms bring.

• **Cloud access and delivery opens up new possibilities for mobility and end user computing.** Through self-service portals and APIs, developers can deploy applications in as fast as 5 minutes and elastically scale them automatically as the majority of the deployment and management capabilities of IaaS are fully automated. New service requests don’t go to a help desk for service provider admins to act on — they’re fulfilled immediately by automation software.

• **Platforms matter if they increase the value the service provider delivers to you.** When considering which service providers to partner with for your public cloud (and hosted private cloud) needs, you should first evaluate the providers on their own merits. It’s pretty rare that the service provider is leveraging a cloud platform as is; nearly everyone is customizing the solution, adding their own differentiation around it, and coupling this offering with a portfolio of other options. But basing their IaaS offering on a cloud platform can give them a leg up and add value to this solution. Being part of a collective that gives you easier means of spanning the globe, faster support for commercial applications, and common tools across cloud implementations (including your own private clouds) may add significant value.
As IT managers turn toward the future, prepare to be challenged by project prioritization issues, budget constraints, imbalances between legacy application and infrastructure architectures and new investments, limited internal skill sets and people resources, and management and security complexities.

- **Firms are struggling to prioritize their efforts toward mobility and cloud-hosted infrastructure services.**
  During the past few years, the momentum of corporate mobility initiatives has accelerated among enterprises of all sizes, with many firms identifying mobility as their key priority. Along with expanding these mobility initiatives, enterprises are trying to identify more cost-effective ways to deliver these services, including using third-party-provided as-a-service solutions in network or cloud-based delivery models. A wide range of mobile devices and applications is making its way into enterprises through corporate-approved channels, as well as from employees who bring their own devices to the office. Many companies are expanding their mobile application deployment initiatives to reach employees, partners, suppliers, and customers, often using a variety of different mobile operating systems.

**Figure 2**
IT Managers Are Shifting Their Investments To The Cloud And X-As-A-Service Over The Next Two Years

<table>
<thead>
<tr>
<th>Technology/Process</th>
<th>In a data center of your company/group</th>
<th>Internally hosted in a private cloud</th>
<th>Externally hosted in a public cloud</th>
<th>Externally hosted in a private cloud</th>
<th>Traditional outsourced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security software and infrastructure</td>
<td>63%</td>
<td>23%</td>
<td>9%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Desktop software and infrastructure</td>
<td>58%</td>
<td>29%</td>
<td>5%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Business processes</td>
<td>57%</td>
<td>29%</td>
<td>11%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Application development software</td>
<td>56%</td>
<td>25%</td>
<td>7%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Computing and storage infrastructure</td>
<td>55%</td>
<td>31%</td>
<td>9%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Integration and middleware platforms</td>
<td>53%</td>
<td>29%</td>
<td>9%</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>Business intelligence and analytics</td>
<td>51%</td>
<td>31%</td>
<td>9%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Business applications</td>
<td>50%</td>
<td>29%</td>
<td>11%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Our website</td>
<td>43%</td>
<td>22%</td>
<td>17%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Collaboration software</td>
<td>40%</td>
<td>32%</td>
<td>17%</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Base: 150 IT decision-makers at North American enterprises

Source: A commissioned study conducted by Forrester Consulting on behalf of Dell and Intel, November 2011

**IT Faces Budget, Project Prioritization, And Internal Skill Set Challenges**
• **Firms are in the early stages of shifting their app delivery from on-premises to cloud-hosted and virtualized.** With server virtualization now well established in the world’s data centers, IT managers are turning their attention toward application and desktop virtualization to address some of their toughest computing challenges (see Figure 3). But there’s often conflicting guidance and endless architectures to consider (see Figure 4). Because there’s no one-size-fits-all solution for all user types and application workloads, IT managers are finding that it will take a combination of technologies to deliver the richest computing experience to your distributed and increasingly mobile workforce. Firms often require help with their implementation planning, with everything from infrastructure requirements, build, and configuration to application sequencing, image creation, virtual desktop provisioning, and user migration schedules and time scales.

• **Limited budgets, people, and skill sets force firms to take evolutionary steps as opposed to revolutionary.** New mobility, cloud, and data center initiatives require cross-team and cross-technology collaboration. Unfortunately, the survey found that most projects are led in a siloed fashion by either the data center team or the desktop team. Firms often find that when data center teams lead initiatives, they first seek to leverage existing technology skills and then try to make the data center side of the environment as easy to manage and secure as possible, even if their decisions will reduce end user accessibility or result in a less useful service. How well the mobility solution performs on the network, how end users will request access to new environments, or how the device pieces will be rolled out and updated globally are considered someone else’s problems to solve. When desktop teams lead the project, they tend to think about end user experience and access as well as how to manage the environment across widely distributed geographies. However, they usually fail to consider critical data center items such as how server capacity will be monitored and expanded, how network segments need to be routed for roaming users, and data backup and recovery needs.

• **Firms need to solve the management and security complexity challenges.** The addition of virtual applications and desktops to your organization’s IT service portfolio creates a hybrid environment with greater complexity. Manage this complexity by assembling a core team and empowering them, then adding key skill sets from the technology domains both inside the data center and outside with an extended team. Set clear priorities and goals, and challenge the teams to deliver the hybrid environment with the minimum number of tools and with end user experience and satisfaction as core values.
Figure 3
Firms Knowingly Support An Average Of 1,200 Applications Worldwide, Across A Mix Of Delivery Architectures

“Approximately how many applications does your organization support worldwide? Please provide your best estimate”

<table>
<thead>
<tr>
<th>Application Type</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locally installed, third-party apps</td>
<td>485.2</td>
</tr>
<tr>
<td>Web apps</td>
<td>331.2</td>
</tr>
<tr>
<td>Locally installed, custom-developed apps</td>
<td>228.6</td>
</tr>
<tr>
<td>Virtual apps (e.g., server-hosted, streamed, etc.)</td>
<td>126.9</td>
</tr>
</tbody>
</table>

Base: 150 IT decision-makers at North American enterprises

Source: A commissioned study conducted by Forrester Consulting on behalf of Dell and Intel, November 2011

Figure 4
Firms Are Aggressively Virtualizing Their Applications And Have Plans To Accelerate Their Desktop Transformations

“How important are the following projects over the next 12 to 18 months?”

<table>
<thead>
<tr>
<th>Project</th>
<th>Critically important</th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not at all important</th>
<th>Don’t know/not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC upgrades to Windows 7</td>
<td>27%</td>
<td>40%</td>
<td>21%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Desktop virtualization initiatives</td>
<td>17%</td>
<td>34%</td>
<td>29%</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>Workspace virtualization initiatives</td>
<td>11%</td>
<td>34%</td>
<td>33%</td>
<td>20%</td>
<td>2%</td>
</tr>
<tr>
<td>Application virtualization initiatives</td>
<td>10%</td>
<td>35%</td>
<td>29%</td>
<td>23%</td>
<td>3%</td>
</tr>
<tr>
<td>Alternative computing hardware such as tablets, smartphones and employee-owned device</td>
<td>9%</td>
<td>33%</td>
<td>39%</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Desktops-as-a-service</td>
<td>7%</td>
<td>22%</td>
<td>30%</td>
<td>39%</td>
<td>2%</td>
</tr>
<tr>
<td>All of the above</td>
<td>5%</td>
<td>37%</td>
<td>37%</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Base: 150 IT decision-makers at North American enterprises

Source: A commissioned study conducted by Forrester Consulting on behalf of Dell and Intel, November 2011
IT Focuses On People And Process Implications Just As Much As Technology

As IT managers build their next-generation mobility strategies, they’re optimizing their people and processes just as much as their technology to better serve internal and external customers.

- **IT leaders need to balance their data center, cloud, and mobility investments carefully.** IT needs to focus 2012’s budget on growth. Why? Because nearly half of the IT operating and capital budget is being set aside for new IT initiatives and increasing capacity to support business expansion (see Figure 5). For IT, this means prioritizing budgets: It’s no longer sufficient to set aside half your budget for incremental data center improvements and the other half for incremental desktop and mobility improvements. However, these aren’t the wrong categories; it’s just a matter of focusing your budget on new capabilities. To maximize your budget efforts, you should start by transforming your desktop environments, continue by retooling your data center to support a path to cloud, and round out your efforts by industrializing your IT operations (see Figure 6).

- **Embrace desktop virtualization and emerging management solutions to realize device independence.** Desktop and application virtualization can help IT managers bring a measure of control to an increasingly chaotic environment, while not stifling employee flexibility and innovation. By leveraging these emerging technologies, IT managers can support user choice and manage the essentials of consumerization. While in parallel, firms must aggressively upgrade users to modern desktop environments to reduce costs, maximize productivity, and improve business efficiency and customer satisfaction.

- **Take advantage of cloud-hosted services to reduce security, management, and cost concerns of devices.** If you still think the best answer when deploying any new application is to buy a server and rack it in your data center, you are woefully behind the times and may just be making the most expensive and slowest decision possible. Myriad deployment options exist today, from colocation to virtual machine hosting, and this collection of options has been blown out even wider thanks to the advent of cloud computing.

- **Build out open, client-aware infrastructure for automated provisioning and end user self-service capabilities.** If you find that your organization isn’t ready to administer a unified infrastructure and is simply too far away from being ready for the automation, self-service, and standardized deployment methods these solutions bring, but you want to give this value to your business now, you have another option. You can ask a managed services provider to operate these solutions on your behalf.

- **Optimize data centers to cut costs and reinvest in the solutions to support new technology initiatives.** Infrastructure innovation marches on — but not always in ways that deliver better overall efficiency. Often, innovations in server, storage, or networking are out of step with each other, driving up complexity. However new solutions are focused on helping customers create virtual infrastructure pools, and the abstracted nature of virtualization widens the applicability of the solution. And, rather than deliver proprietary solutions, leading vendors are delivering prepackaged server, storage, network, and management solutions that use a preselected best-of-breed approach. These solutions let you take the next step with virtualization; drive consistency in deployment, performance, and ease of administration; enable rapid installation and one-stop support; create an easier path to internal cloud; and build internal shared services.
- **Engage with end users to understand their current and future technology needs.** When it comes to deciding what employees need from technology, IT has gamely applied well-regarded and typically valuable techniques: Interview stakeholders, collect requirements, build a project plan, and review it with the customer. These techniques can work well for infrastructure projects and sometimes for applications driven by a top-down business need. But when it comes to discretionary technologies that employees use every day — PCs, phones, productivity apps, collaboration tools, and employee portals — these techniques sometimes fail to capture the needs of a diverse workforce. The results can be painful. To have a fact-based conversation about what your employees need from technology, you have to ask them. Field a survey when you absolutely must have the facts without bias. For a quick and dirty validation, interview IT stakeholders. To identify key issues, interview business managers and employees. Use focus groups to validate segments and gather valuable human intelligence. For major strategic investments, blend these techniques to get the most complete picture. These techniques are a valuable part of your assessment tool kit. We urge you to use one or more of them before making vital decisions about workforce segmentation, hardware refreshes, software license renewals, virtual desktop implementations, smartphone strategies, consumerization assessments, collaboration services, or telecommuting policies.

- **Update organizational policies to empower workers while protecting the integrity of the business.** IT managers must collaborate with their legal, HR, and finance departments as well as line-of-business managers to determine whether and how their existing policies can be extended to their modern desktop and mobile computing environments. The resulting policies must be agreed to by all users who wish to be included in pilots such as the BYOD program, IT should require the approval of their direct managers as there may be chargeback and support implications, and users should be encouraged to go to their self-service website or portal for program enrollment, getting started instructions, and ongoing support.

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**Figure 5**

Nearly Half Of The IT Operating And Capital Budget Will Go To New Initiatives And Supporting Business Expansion

“Thinking about all of your firm’s employees with a smartphone and/or tablet, what percentage of them get their device in the following ways?”

- Company provides the device directly to the employee (no employee choice) (N = 121)
  - 55.2%
- Employee chooses it from a list of company-approved devices (N = 130)
  - 36.2%
- Employee independently chooses his/her device (N = 134)
  - 23.2%

**Mean**

Base: 150 IT decision-makers at North American enterprises

*Source: A commissioned study conducted by Forrester Consulting on behalf of Dell and Intel, November 2011*
### Figure 6
Data Analytics, Mobility, Security, And Virtualization Are The Top Four IT Priorities Over The Next Year

"Which of the following initiatives are likely to be your IT organization’s top technology priorities over the next 12 months?"

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Critical priority</th>
<th>High priority</th>
<th>Low priority</th>
<th>Not on our agenda</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve or increase data utilization and analytics</td>
<td>22%</td>
<td>50%</td>
<td>23%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Expand use of mobile technologies for employees and customers</td>
<td>20%</td>
<td>49%</td>
<td>29%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Significantly upgrade our security environment</td>
<td>24%</td>
<td>41%</td>
<td>31%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Pursue a virtual desktop or application virtualization strategy</td>
<td>20%</td>
<td>43%</td>
<td>29%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Consolidate IT infrastructure</td>
<td>19%</td>
<td>40%</td>
<td>29%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Implement or expand use of collaboration capabilities</td>
<td>15%</td>
<td>41%</td>
<td>35%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Significantly upgrade BC/DR capabilities</td>
<td>22%</td>
<td>33%</td>
<td>37%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Pursue a cloud infrastructure service strategy internally</td>
<td>14%</td>
<td>37%</td>
<td>32%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Implement/expand use of videoconferencing and other video technologies</td>
<td>14%</td>
<td>37%</td>
<td>40%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Pursue software-as-a-service (SaaS) offering strategy</td>
<td>11%</td>
<td>36%</td>
<td>37%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Redesign/redeploy IT architecture</td>
<td>12%</td>
<td>31%</td>
<td>39%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Pursue a cloud infrastructure service strategy externally</td>
<td>9%</td>
<td>21%</td>
<td>41%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Support Web 2.0 technologies like blogs and social networking tools</td>
<td>8%</td>
<td>19%</td>
<td>49%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Pursue outsourcing or offshoring</td>
<td>3%</td>
<td>14%</td>
<td>37%</td>
<td>43%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Base: 150 IT decision-makers at North American enterprises

Source: A commissioned study conducted by Forrester Consulting on behalf of Dell and Intel, November 2011
**KEY RECOMMENDATIONS**

The consumerization of IT and the emergence of smartphones and tablets in the enterprise are completely changing IT’s relationship with the business: moving from a technology-centric point of view to one that is user-centric. In this world, user experience and self-service become fundamental tenets of any mobile strategy to enable BYOD programs and combat “rogue IT” initiatives. Such a significant shift in strategy means that IT professionals will need to build a five-year road map for mobility to execute effectively and to take advantage of cloud-hosted infrastructure, applications, and managed services.

Road maps are communication vehicles that provide insight and perspective to guide decision-making. For a road map to be effective, you have to link it directly to business goals and strategies, and it must resonate with the business and your IT counterparts. To keep your mobile road map visible and relevant to the business, we recommend that you:

- **Revisit your road map every six months.** Annual planning cycles for a mobile management and security road map or a mobile application development and provisioning road map will result in dated plans. Given how quickly device capabilities, user behaviors, and business requirements are evolving, plan to revisit your road map at least twice a year.

- **Share and communicate the road map with key stakeholders frequently.** You should have a formal marketing plan that identifies: 1) the key stakeholders that you need to influence (i.e., enterprise architects, application developers, security and risk professionals, etc.) as well as the messages for each; 2) the frequency of communication; and 3) the method of communication (i.e., in-person meetings, quarterly status reports, etc.). This seems obvious, but it’s particularly important because mobility affects so many roles within IT — roles that you need to influence or gain buy-in from.

- **Actively seek feedback from business users into the road map.** As part of road map planning you must segment your employees to understand their requirements and tier mobile management and security approaches accordingly. Road map planning should also include a business user feedback loop — you don’t want to decide on a course of action (say limiting device support to just a few select platforms) only to learn that it’s no longer valid.
Appendix A: Methodology

Forrester conducted an online survey of 150 IT decision-makers at companies with 1,000 or more employees across multiple industries in the US and Canada. The focus of the study was to develop an independent and objective thought leadership paper that educated the market on key enterprise trends that span mobility and cloud strategies. The survey respondents were screened by geographic region, company size, and specific functions respondents had authority over in IT. The online survey was administered and completed in November 2011.

Appendix B: Endnotes