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IT Consumers Transform the Enterprise: Are You Ready?



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Executive Summary

Today's enterprises increasingly find their IT and business strategies being transformed by consumer-class online services and technologies, which include cloud-based and mobile applications, online social networks, rich media, and smart mobile devices. Although these solutions create technology management challenges for enterprise IT operations, they open up new market opportunities, empower employees, and blur the boundaries between work and home. Sometimes referred to as the "consumerization of IT," this trend creates a new set of challenges to existing enterprise IT security, management, and automation strategies.

To better understand the opportunities and impacts of this trend, IDC undertook two parallel global surveys of enterprise IT decision makers and sophisticated IT consumers. These surveys examined the degree to which consumer-scale services and technologies are transforming the workplace and the way IT leaders need to secure, manage, and automate operations in the face of unprecedented economics of scale and rising user expectations for anytime, anywhere access to mobile and Web-based business services. Key findings include:

The consumerization of IT is enabling new opportunities for organizations in the private and public sectors. Consumer-class technologies and services are changing the way enterprises communicate with customers, partners, and constituents, with benefits including improved customer reach, engagement, and intimacy. They are also changing how employees work and collaborate internally.

Cloud, mobile, and social technologies are expanding the playing field for IT. These technologies are changing the day-to-day operational priorities for many IT organizations. IT's primary objectives are shifting away from the optimization of server, storage, network, and software components toward enabling new types of business services, customer engagement, and overall business agility. IT is being called upon to help the business more rapidly scale and execute innovative new business models that capitalize on the following opportunities:

- **Blurring of business and personal boundaries.** There is more crossover between technologies used for personal and work purposes, with employees taking advantage of consumer offerings at work (e.g., employees logging into a social network page), and more work functions being done during off-hours. This is driving a need for greater collaboration between business units and IT and more flexible and responsive IT policies.
- **Increasing mobility of customers and employees using smartphones and tablets.** More consumers and employees are accessing applications and services remotely using powerful smartphones and tablets (such as iPads). More business transactions are occurring over these devices, and enterprises are being challenged to rapidly transform business service Web interfaces, step up identity and access control strategies, and develop strategies for accommodating unpredictable Internet and cell phone connect quality.
- **Increasing adoption of social network technologies by customers and employees.** IDC found that social network technology directly correlates to business innovation, expanding markets, and increased revenue opportunity. Not surprisingly, business leaders are aggressively driving enterprise use of services such as Facebook and Twitter to engage with customers in real time. Greater consumer adoption leads to greater demand for enterprises to support these technologies in their core business functions.
- **Increasingly credible public cloud computing and software-as-a-service (SaaS) options to enable consumer-facing business services and mobile applications.** Public cloud and SaaS solutions enable enterprises to rapidly scale up customer access to business services while more tightly matching IT spend to business requirements. They also create new enterprise IT requirements to proactively monitor public cloud and SaaS service quality, manage service providers, and develop processes and tools to optimize workload performance across public and private computing resources.



The train is moving faster than you thought. Adoption of public cloud, mobile, and social technologies in business operations has already reached high levels, often driven by “stealth IT” (i.e., by business units or individuals without corporate IT’s knowledge or support). From an IT consumer perspective, IDC found a surprisingly high level of personal and confidential information sharing. Combined, these types of initiatives rapidly introduce new, innovative technologies and services into the organization but expose the organization to business risk, compliance gaps, and security challenges if they are not managed in the context of established data protection, disaster recovery, security, and service-level guidelines. To fully exploit these emerging services and technologies, business and IT groups need to jointly govern investments and operations.

As part of this analysis, IDC evaluated the relative management maturity of enterprise IT organizations with regard to the consumerization of IT (i.e., the adoption of social network, mobile, and cloud service technologies). Our global survey of IT decision makers looked at maturity as measured by technology adoption and proactive business and IT collaboration. The most proactive group, representing 19% of the sample, leads in adoption of advanced IT automation, management, and security solutions. This research indicates that proactive investment in these technologies can directly impact an organization’s ability to fully exploit the value of consumer-scale technologies and services in today’s dynamic, online, interactive business environments.

Introduction

Traditionally, enterprise technology adoption has arrived in waves. From the mainframe and the PC to client/server and the Internet, new paradigms have emerged to define generations of enterprise computing. In the process, they have ushered in new business models and new sources of competitive advantage.

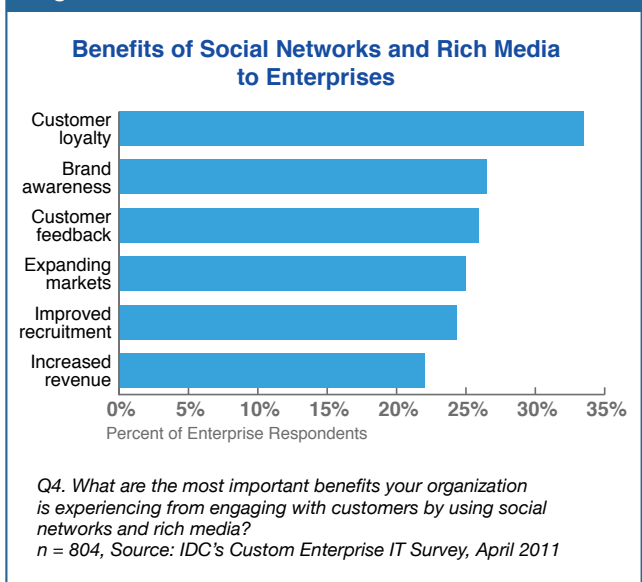
The findings detailed in this report demonstrate clearly that another such wave is now upon us. The wide-scale adoption of public cloud, social media, and smart mobile devices – technologies that each have roots in consumer offerings – is bringing new opportunities and challenges to enterprises, both in the ways that enterprises interact with customers, partners, and suppliers and in the ways employees use the

technologies for internally facing purposes. This trend is often referred to as the consumerization of IT.

“We’re using Facebook and Twitter to drive the business, to let people communicate. To advertise, ‘tell us about your stay,’ ...customer loyalty and things like that, just interaction with the company.”
 – Major hospitality provider

Agile enterprises that move aggressively to adopt these technologies are putting themselves in the best position to take advantage of the consumer scale these technologies open up, that is to say, new business models, new ways to reach customers, new ways to sell products and provide service and support, new ways to increase customer loyalty, and new ways to improve employee productivity. For example, IT executives credit the use of social networks and rich media in customer-facing areas with increasing customer loyalty, improving brand awareness, and providing customer feedback (see Figure 1). In turn, IT organizations must be more agile

Figure 1



in providing the services that support these new technologies and business models. This requires IT to radically rethink the way it operates and the management tools and infrastructure it has in place to support initiatives to adopt consumer technologies.

To better understand these new dynamics and the challenges and opportunities faced by enterprises, IDC performed a study leveraging two global surveys: one of enterprise IT executives and one of IT consumers (sophisticated consumers who regularly use technology both in their personal lives and at work). These studies surveyed 804 IT executives and 1,040 IT consumers in eight countries. Study findings were supplemented by a focus group of U.S. enterprise IT executives from organizations with over \$2 billion in revenue, along with IDC's ongoing research and analysis. For additional details, see the Methodology section.

The Surprisingly Widespread Adoption of Consumer Technologies for the Enterprise

The adoption of consumer technologies – public cloud, mobile, and social network technologies – by and within the enterprise is widespread and is growing rapidly. While this adoption has not always been driven by IT itself, many IT organizations find themselves being challenged to move these solutions from “sandbox” to production-scale operations, particularly with regard to implementing automation, management, and security solutions to protect the business and ensure optimal customer and employee experiences.

IT Consumers' Online Activities

IT consumers are online every day, engaging in a wide range of business and personal activities. Topping the list of online activities for personal use is email, followed by personal finance and ecommerce, both of which require high degrees of online trust and depend on consumers to share confidential, personal information (see Figure 2).

When IT consumers were asked which activities they also do online for business use, email again topped the list, followed by voice conferencing, syncing data, and using productivity tools. Data storage and social media including groups, blogs, and ratings top the scale of activities they don't currently perform but would like to do for business, indicating that

Figure 2



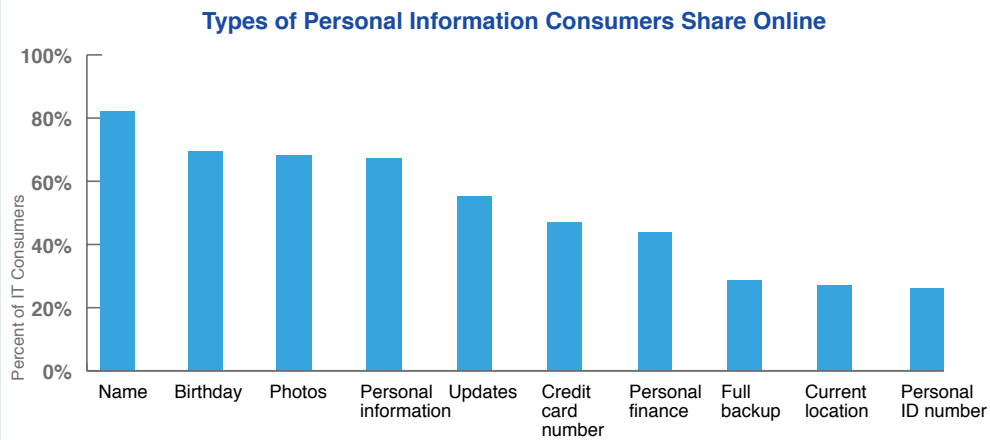
workers see the value of these activities and that many workers are adopting them regardless of the levels of corporate adoption.

Looking through a device lens, we find that once again email is the most-performed online activity, used by 79% of smartphone owners and 69% of tablet owners. Interestingly, social media rises to the second most frequent activity on tablets and number 3 on smartphones, reflecting the strong tie between social and mobile in the consumer sphere. Texting/IM, downloading applications, and streaming video are the other most common activities on smartphones and tablets.

Consumers are sharing and storing sensitive personal information in the cloud at very high rates (see Figure 3). Well over half are sharing information that can be used to steal their online identity, such as birthdays, personal information, and credit card numbers, as well as information that could be used to compromise their physical safety, such as photos and status updates (e.g., broadcasting when they go on vacation and the house is vacant). More than one in four even share their current physical location. This speaks not only to the wide-scale proliferation of consumer cloud services but also to the importance to enterprises that provide these services to keep customer data safe and secure.



Figure 3



Q5. Thinking of all the activities and services you use online using any device, what types of data have you shared/stored with these online services? n = 1,040, Source: IDC's Custom IT Consumer Survey, April 2011

Regional differences are interesting to note, particularly in China, where IT consumers are much more likely to share personal identification information akin to Social Security numbers in the United States (43% of Chinese respondents share this information online compared with 26% of the worldwide total). IDC believes this is because Chinese IT consumers come from a culture in which they are more likely to provide this information in the offline world and are more likely to put their trust in centralized authority.

Rising Level of Mobile Device Use and Transactions Challenging Security and Management Strategies

Among IT consumers, the shift from PCs to smart mobile devices is already under way. While 88% of IT consumers surveyed use a desktop PC to access the Internet for business or personal reasons and 91% use a laptop, fully 80% access the Internet using a smartphone, and 36% – over one-third – access it via a tablet (e.g., iPad)(see Figure 4). These are remarkable penetration rates for smart mobile devices, especially considering that smartphones and tablets capable of providing a rich interactive experience have been on the market for less than four years and less than 18 months, respectively.

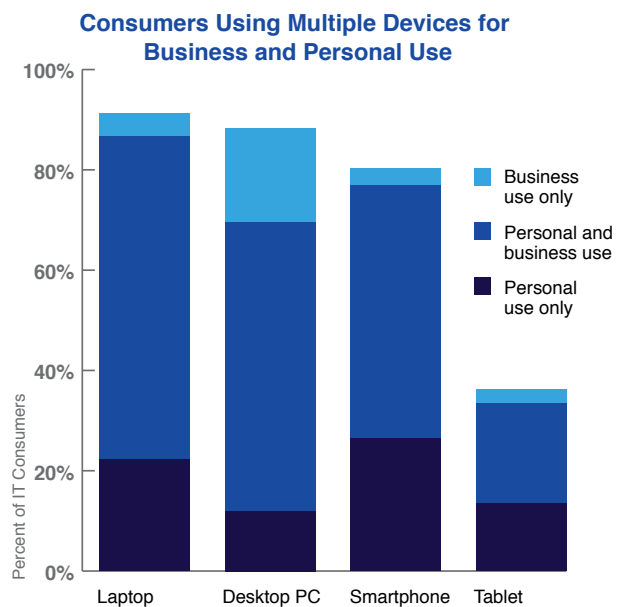
Again, there were notable regional differences in the data. Asian IT consumers were some of the least likely to use

devices strictly for personal use and some of the most likely to use devices for combined business and personal use (65% of respondents in both China and Singapore use their mobile devices for a mix of business and personal use).

Figure 4 displays the degree to which the lines between personal and business use are blurring. While a small minority of consumers use their mobile devices only for personal use, and an even smaller minority strictly for business, the majority use their devices

for both business and personal use – a finding seen across all device categories.

Figure 4



QS6_1. Which of the following devices do you use to access the Internet for either business or personal reasons? n = 1,040, Source: IDC's Custom IT Consumer Survey, April 2011

Enterprises are experiencing the impact of the increasing use of mobile devices across their worldwide customer base. Among IT executives surveyed, 22% of current online customer transactions are already conducted over mobile phones, and another 9% are conducted via tablets. Penetration is highest in the Americas, and in the United States in particular, where smartphones and tablets combined account for 34% of interactions (and tablets alone account for 11%), and is lowest in Asia (where 25% of transactions are from smartphones and tablets). Enterprises see growth continuing, with mobile devices expected to represent more than one in three online customer transactions worldwide by 2013.

As more consumers use mobile devices on a daily basis, they have greater expectations that the companies whose products or services they consume also support interactions via their mobile devices. Sixty-three percent of IT consumers surveyed rated it somewhat or very important that companies support mobile devices as a way to purchase or use products and services, and the same number rated it somewhat or very important that companies provide service and support over mobile devices.

Further, the requirement to support mobile devices extends beyond external audiences such as customers and partners to internal audiences. Employees are using their mobile devices at work in greater numbers, and they are no longer always corporate-standard devices. The U.S. IT executive focus

group participants told us that mobile device management is one of their greatest challenges, and most are in reactive mode as they scramble to support the new devices that employees are bringing into their organizations.

“Mobile devices are something that [our users] have – they’re already in our organizations. It was hard to stop them.”
– Major real estate firm

When it comes to supporting customers’ use of mobile devices, the need for automation, management, and security stands out. Survey respondents were asked about the greatest challenges associated with supporting customers’ mobile devices and cited reasons relating to performance (slow Web page response times, lack of browser control, and difficulty guaranteeing customer experience) and security (difficulty protecting personal information) (see Figure 5).

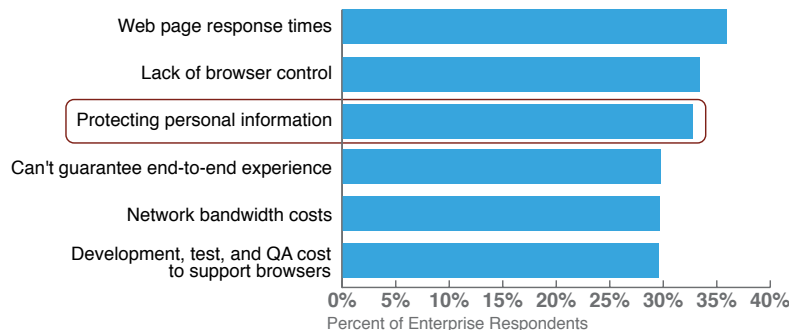
Social Networks Reach Across Business and Personal Boundaries

IT consumers cited a high degree of activity in social networks such as Facebook, LinkedIn, Twitter, and Myspace. Over half said that they read other people’s postings at least daily, and a full 85% read posts at least once a week. Thirty-one percent generate their own posts every day, with 69% doing so at least once a week. A large part of the activity is happening in the office, with 52% of IT consumers agreeing with the statement “I expect to be able to access social networks such as Facebook and Twitter at work.”

On the surface, many IT organizations look at such statistics and see a potential security risk, and it’s true that organizations must put in place the appropriate policies and safeguards to protect enterprise data. More proactive organizations look at the trend and recognize that social media presents new opportunities for deepening relationships with customers.

Figure 5

Enterprise Challenges in Supporting Customer Use of Mobile Devices



Q11. What are the biggest challenges that customer use of mobile devices poses to delivery and support of your organization’s objectives?
 n = 804, Source: IDC’s Custom Enterprise IT Survey, April 2011

Already companies are taking advantage of these opportunities by launching campaigns on their Facebook pages and leveraging location-based services such as Foursquare to let customers know about special deals nearby.

Consumers increasingly expect the companies they do business with to support a social media interface. Forty-eight percent rated it somewhat or very important that companies use social media as a way to purchase products or services, and 50% said that it's somewhat or very important for companies to provide service and support via social media. For their part, enterprises also see the business value in supporting social networks; survey respondents credit social networks and rich media with improving customer-facing functions and expanding business models and marketing reach (refer back to Figure 1).

The challenges of supporting social networks also point to the need for security, with the need to protect confidential information and the need to defend against malicious attacks topping the list. Enterprises also identified other management and automation needs, including capacity planning, monitoring and validating service levels, and maintaining a consistent user experience, as important concerns (see Figure 6).

Blurring of Boundaries

Woven throughout the findings is an underlying theme that the boundaries between work and personal services and tech-

nologies are being blurred, driving business and IT leaders to collaborate more actively than ever before. Employees are using mobile devices for both business and personal use,

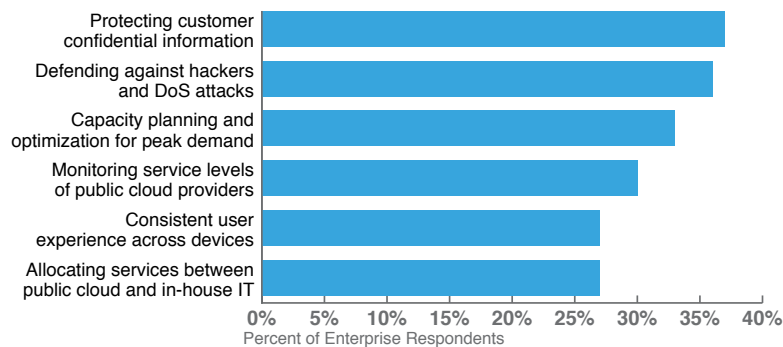
“The staff that are coming on now, they are used to social media. They’re the ones bringing in iPads and Droids and smartphones, so...we can no longer say ‘You have to use a BlackBerry because that’s what we are issuing’ because they’re just going out and buying their own.”
– Large construction company

while social networks, once focused exclusively on consumer use, are also being used widely for both purposes. Consumers and business workers expect to be online every day working seamlessly across applications that are hosted in public cloud and SaaS services, private enterprise clouds and datacenters, and traditional IT environments.

One ramification of this blurring of the boundaries is that employees’ expectations for the performance, availability, and security of the services and technologies they use in the workplace are being influenced by their IT experiences as consumers. Three out of four IT consumer respondents somewhat or completely agree with the statement “I expect to have devices at work that are at least as good/leading edge as the ones I have in my personal life.” Interestingly, the survey showed that the technology flow actually works both ways: While 64% agree with the statement “I learn about new technologies and applications in my personal life and bring them into the office,” another 61% agree with the statement “I learn about new technologies and applications at the office and bring them into my personal life.”

Figure 6

Enterprise Challenges in Making Use of Social Networks



Q6. What are the top three greatest challenges your IT organization faces in making effective use of online social networks?
 n = 804, Source: IDC's Custom Enterprise IT Survey, April 2011

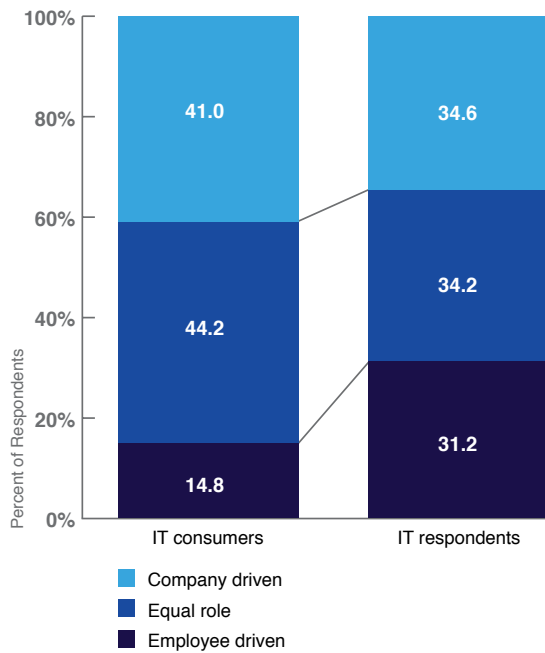
As to who introduces new technology into the workplace, the surveys show that it's a mix: Sometimes the company is the primary driver, sometimes it's the employee, and in many instances, the two play an equal role. But setting the responses of the employers and IT executives side by side yields an interesting finding (see Figure 7). While roughly 40% of both sets of respondents said that the company is typically the primary driver, 31% of IT respondents credited employees with playing the leading role compared with only 15% of employees saying they are the primary drivers. This could reflect a "grass is greener" phenomenon; employees expect to be able to access the technologies they use as consumers and don't consider it terribly notable when those technologies are adopted by the enterprise. On the other hand, IT has the burden of supporting new technologies and as such

is more likely to notice when employees bring unsupported devices or applications into the workplace, Examples of such activity are more likely to be top of mind for IT.

“Anything that doesn't have any security aspects or any regulatory mandates that we have to abide by, we're thinking of moving to a cloud-based solution.”
 – Global manufacturing company

Figure 7

Primary Drivers of Mobile Devices, Social Media, and Cloud Use in the Enterprise



Q17. In your opinion, which of the following statements best describes the way new technologies (applications, services, or devices) are adopted within your own organization? n = 1,040, Source: IDC's Custom IT Consumer Survey, April 2011

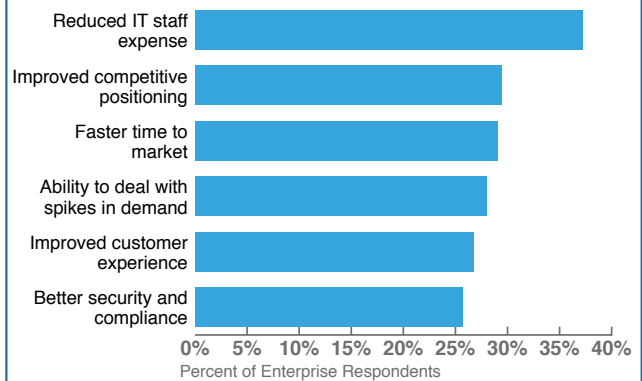
Q22A. In your opinion, which of the following statements best describes the way new technologies (applications, services, or devices) are adopted within your organization today? n = 804, Source: IDC's Custom Enterprise IT Survey, April 2011

Public Cloud Is a Key Enabler

Public cloud is viewed as a key enabler of new technology adoption, enabling IT organizations to improve agility and do more with less (see Figure 8). Primary benefits include reduced IT staff expense, improved competitive positioning, faster time to market, and ability to deal with spikes in demand, all well-understood benefits of cloud services. Regionally, IT executives in the Americas placed the highest emphasis on reducing IT expenses, with 42% of U.S. respondents citing this benefit compared with 37% of global respondents.

Figure 8

Greatest Enterprise Benefits of Using Public Cloud to Interact with Customers



Q8. To the extent your organization currently makes use of public cloud services to interact with and support your customers, what are the most important benefits your organization experiences? n = 804, Source: IDC's Custom Enterprise IT Survey, April 2011

The benefits to the organization are viewed as table stakes for the enterprise's success. While several focus group participants spoke of exercises to build a quantifiable ROI model for investments in public cloud, social, and mobile technologies, most agreed that it has become a minimum cost of doing business today and critical for their organizations to maintain their competitiveness in the market.

Meanwhile, enterprises listed security and safety of data as some of the greatest challenges associated with using public cloud to interact with customers (security/compliance concerns and validate/audit data protection). Those challenges were followed by performance and management issues: inability to customize the service to deliver business advantage and ensuring service provider responsiveness and support (see Figure 9). European executives placed the most emphasis on security concerns, with 42% of European respondents citing it as an issue compared with 37% of global respondents.

Leading IT Organizations Are Embracing the Change

In the past, many technologies have been introduced to the enterprise from the grassroots up rather than from the top down. Web conferencing and instant messaging are examples of stealth IT: solutions that are introduced by individual workers and business units, often without the knowledge of IT, before eventually being embraced and supported by the enterprise. This is a common, cyclical adoption pattern that

has played out many times before and is now being played out with social, mobile, and public cloud technologies.

“Stealth IT,’ the ability for users and LOBs to go to Rackspace or Amazon with their credit card, and fire up some virtual servers, and put all kinds of data out there. [IT management] would never know about it. I think that’s one of our fears with cloud services.”
– Major advertising agency

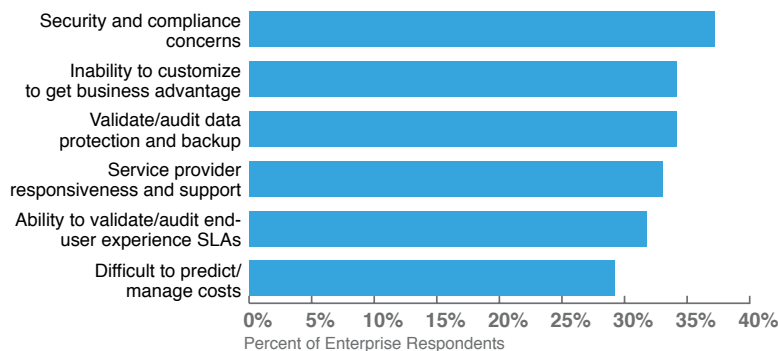
When enterprise IT respondents were asked where they currently stand in their degree of adoption of mobile, cloud, and social technologies, 19% – nearly one in five – characterized their stance as “very proactive” (see Figure 10). For a roughly equal number, 15%, the business units are leading with little or no IT involvement. The remaining 66% are somewhere in between: They are following the market, are in planning stages, or have growing IT involvement. While there were slight variations by country, these ratios generally held up in all countries studied. A look at the choices these

organizations are making with regard to developing their strategies and investing in automation, management, and security provides useful insights for other organizations that are struggling to effectively address the challenges and opportunities presented by the rapid consumerization of IT.

This pattern is particularly clear in the adoption of social media. While 65% of enterprise IT respondents said their organization is using general-purpose social communities such as Facebook and Twitter to communicate with customers, in more than half of these companies, such efforts are being led by the business units, and IT is not involved. Similar patterns were described

Figure 9

Enterprise Challenges in Using Public Cloud to Interact with Customers

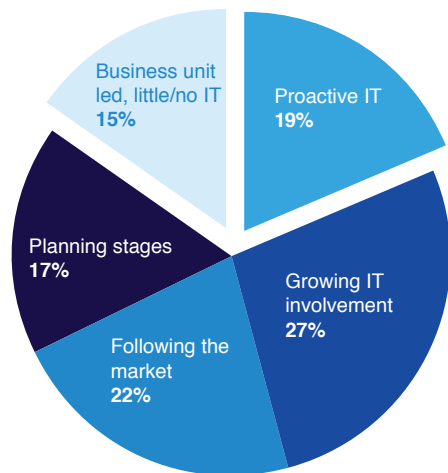


Q9. To the extent your organization currently makes use of public cloud services to interact with and support your customers, what are the greatest challenges your organization faces working with these services? n = 804, Source: IDC's Custom Enterprise IT Survey, April 2011

with online forums, blogs, and other online communities sponsored by the company.

Figure 10

Overall Approach to Enterprise Social, Mobile, and Cloud



Q1. How would you describe your IT organization's approach to the use of cloud-based or mobile applications and services, online social networks, rich media, and smart mobile devices? n = 804, Source: IDC's Custom Enterprise IT Survey, April 2011

Actively Embracing the Change: A Profile of the Leaders

To better understand opportunities in this area, IDC examined the companies that are self-reportedly most proactive in their approach to adoption of public cloud, mobile, and social technologies. These "leaders," as IDC refers to them, make up 19% of the sample, nearly one in five respondents. IDC believes that these companies can offer a snapshot of how consumer technology adoption is creating business value in the enterprise today and offer both an example for the mainstream IT organizations that are about to take the plunge and hints at the associated business value.

Leaders look different from mainstream IT organizations. They are more proactive in adoption of consumer technologies, they are more likely to work with business units to implement required changes, and they are more likely to integrate a wider range of cloud-based and mobile applica-

Top Characteristics of Leaders

1. More likely to say public cloud, social, and mobile strategy is driving their overall business strategy to at least a moderate extent (47% versus 37% of mainstream organizations)
2. 34% use platform as a service (PaaS) (versus 22% of mainstream organizations), 27% use infrastructure as a service (versus 19% of mainstream organizations), and 32% use white label software as a service (SaaS) (versus 18% of mainstream organizations)
3. More focused on data protection and backup frequency and accuracy in their public cloud deployments (an issue for 42% of leaders versus 32% of mainstream organizations)
4. Conducting more interactions with their customers via smart mobile devices (41% versus 28% of mainstream organizations)
5. Using social networks to capture detailed insight about customers (44% versus 24% of mainstream organizations)
6. Increasing their use of interactive technologies such as video, Skype, and chat (38% versus 26% of mainstream organizations)
7. More concerned about the ability to guarantee end-to-end user experience via mobile devices (41% versus 27% of mainstream organizations)
8. Using public or private cloud to provide remote personal productivity tools to employees (43% versus 29% of mainstream organizations)

tions and services into both customer-facing and business initiatives. It's also more likely that a public cloud, mobile, and social strategy is driving the overall business strategy among leaders than among other companies.

For example, leaders conduct more interactions with their customers via smart mobile devices (41% versus 28% of

mainstream organizations), demonstrating that they have already embraced and adopted mobile as a platform for customer interaction and have put in place the management tools and security offerings necessary to support mobile. They are also more proactive when it comes to social media. They are more likely to use social networks to capture detailed insights about their customers (44% versus 24% of mainstream organizations) and are more concerned about providing a consistent user experience to customers via social networks across all devices or browsers (31% versus 26% of mainstream organizations).

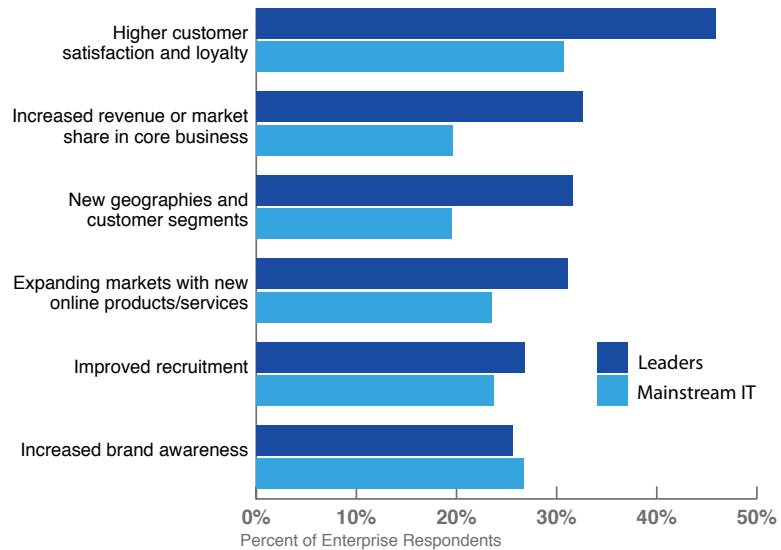
Leaders Are at the Forefront of Driving Business Value

Leaders' focus on consumer-grade technologies is paying off in terms of improving enterprise agility and driving business advantage. They are much more likely to cite strategic benefits to their enterprise through the use of social media, with 46% saying that it yields higher levels of customer satisfaction and loyalty (compared with 31% of mainstream organizations) and 33% saying that it yields increased revenue or market share (compared with 20% of mainstream organizations) (see Figure 11). Leaders are also more likely to realize cost, efficiency, and performance savings from their use of public cloud services (see Figure 12).

Leaders are aware that public cloud can help them deliver these customer-facing consumer-grade technologies. They are more likely to turn to public cloud in general to enhance their IT service delivery and are more proactive about cloud deployment in a variety of forms: 34% use platform as a service (PaaS) versus 22% of mainstream organizations, 27% use infrastructure as a service (IaaS) versus 19% of mainstream organizations, and 32% use white label SaaS versus 18% of mainstream organiza-

Figure 11

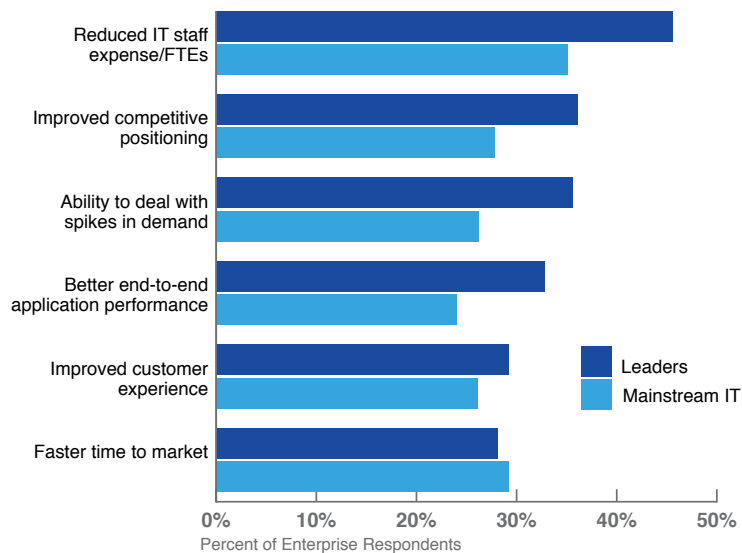
Enterprise Benefits of Using Social Networks and Rich Media



Q4. What are the most important benefits your organization is experiencing from engaging with customers by using social networks and rich media? n = 804, Source: IDC's Custom Enterprise IT Survey, April 2011

Figure 12

Enterprise Benefits of Using Public Cloud to Interact with Customers



Q8. To the extent your organization currently makes use of public cloud services to interact with and support your customers, what are the most important benefits you organization experiences? n = 804, Source: IDC's Custom Enterprise IT Survey, April 2011

tions. Further, they demonstrate a sophisticated view of cloud as they are also very highly focused on data protection and backup frequency and accuracy in their public cloud deployments; this was cited as an issue by 42% of leaders compared with 32% of mainstream respondents.

Automation, Management, and Security

Leaders are more likely to place a premium on automation, management, and security to take advantage of cloud, social networks, and mobile devices. They see a greater impact on IT solutions by current and future implementations of mobile, social, and public cloud technologies (see Figure 13). Top solutions they see affected include data protection/backup, virtualization, infrastructure performance management and optimization, and application performance management and optimization.

In terms of systems management, leaders again see greater impacts across the board (see Figure 14). Topping the list are greater automation of data backup and recovery, improved capacity planning and utilization analysis, integration across the application development and deployment life cycle, and need for more advanced virtualization management tools.

Figure 13

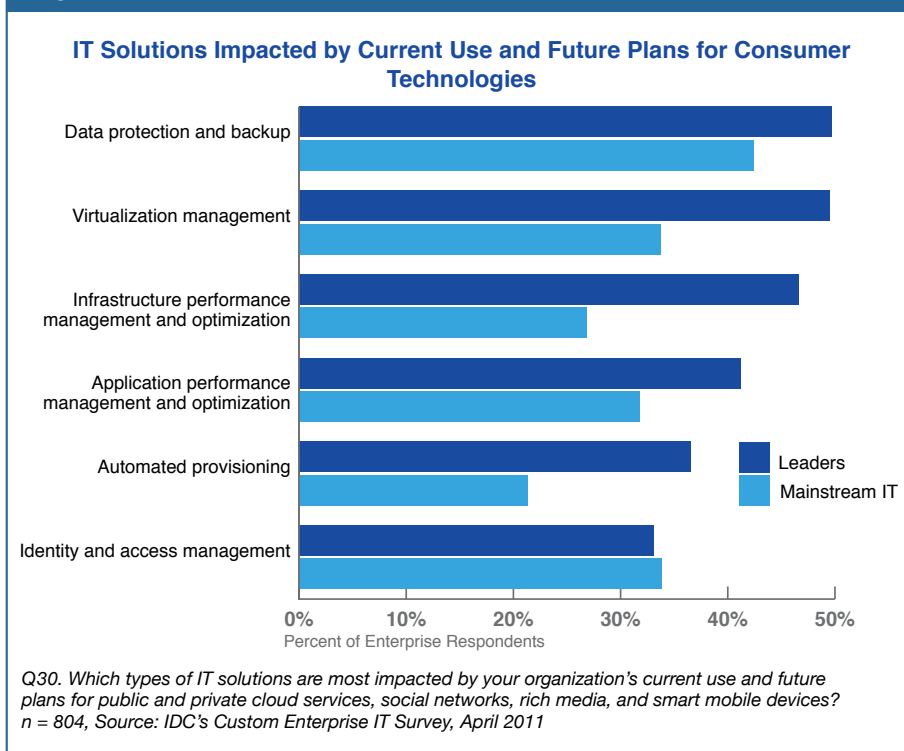
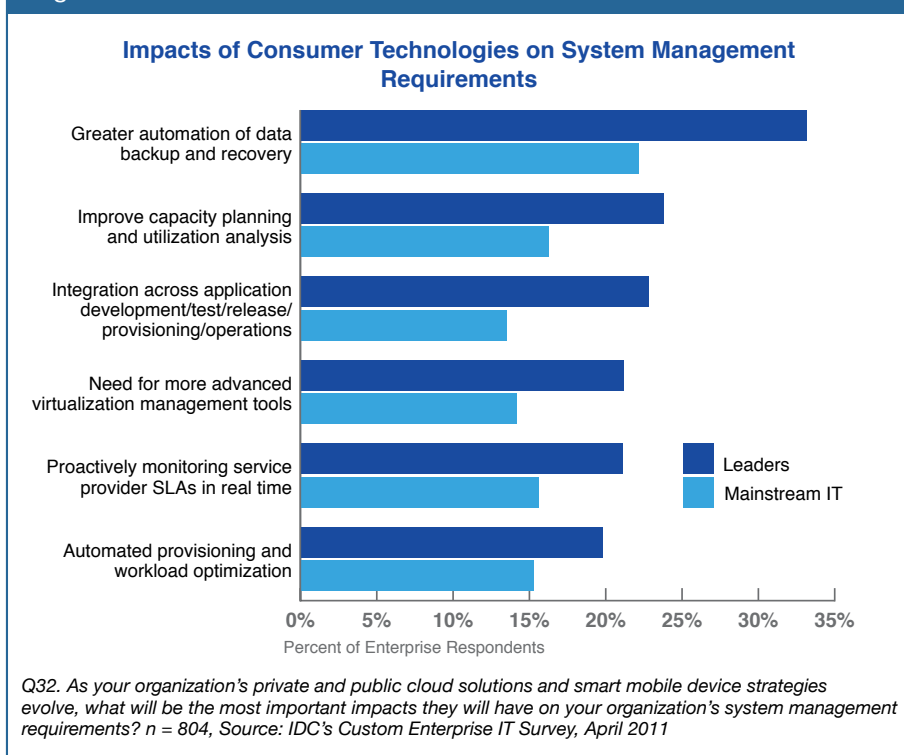


Figure 14





Essential Guidance

Consumer technologies are transforming the way enterprises interact with their customers and employees. They enable new and better channels by which businesses can attract and retain customers, but they also allow IT to reduce costs, improve service levels, and enable more secure and dynamic IT operations and business processes. There is great opportunity available for enterprises that can support these new ways of doing business.

The leaders have told us that the ability to fully exploit opportunities created by social networks and mobility requires IT organizations to think differently about sourcing, automating, managing, and securing IT resources and information assets.

Public cloud and SaaS solutions present IT organizations with a new set of options for rapidly deploying and scaling online applications and business services. Cloud solutions share computing and IT operations staff across many applications and user groups. IaaS solutions such as Amazon EC2 allow enterprise IT organizations to rapidly access compute resources for peak hours and short-term uses. SaaS solutions such as those provided by salesforce.com allow IT organizations to avoid the time and cost needed to purchase, test, and deploy packaged software solutions on internally owned and operated IT assets. SaaS providers host tightly defined application environments on highly standardized infrastructure that can be accessed via standard Web browsers and mobile devices.

Enterprise IT organizations need to collaborate with business stakeholders to determine when online cloud services offer the right solutions and where internal investment is needed to create competitive business advantage. In cases where organizations opt for public cloud solutions, IT organizations will be tasked with ensuring the private data hosted in these services is protected and managed in a way that is consistent with corporate information management policies and regulations. IT will also need to monitor and validate service levels and ensure that service providers are able to consistently deliver the service levels and customer experiences that they promise.

Reaching the Tipping Point for Mainstream IT

IDC believes that this is the perfect time for IT organizations to make a move; the earliest adopters have already jumped on board, and the majority are now beginning to dip their toes in the water. We are currently at the tipping point where IDC expects mainstream organizations to aggressively embrace the adoption of consumerized technologies for the enterprise.

IDC believes that this will be the next “transformative moment” for CIOs. Only a few years ago, when cloud computing and virtualization were the new trends, CIOs were judged based on how proactively they approached those solutions and drove value to the businesses. IDC believes that the current adoption trend of consumer technologies by the enterprise is liable to transform IT and business to an even greater extent, and in the next several years, CIOs will be judged based on how proactive their stance was and how successful they were in driving these technologies into the enterprise.

Specific steps IT organizations should take include:

- **Embrace the cloud; leverage it to enable focus on strategic initiatives.** Focusing on strategic initiatives with in-house resources while outsourcing the non-critical tasks increases IT agility and better prepares IT to adapt to the new challenges of consumerized IT. Cloud can provide an opportunity for IT organization to do more with less, but it clearly introduces new risks and requirements.
- **Embrace endpoint diversity.** With customers, partners, and employees interacting with organizations in more ways with more devices than ever before, supporting these devices will enable enterprises to open new channels of doing business, reach more customers, and improve customer and employee satisfaction.

- **Accelerate automation of management and control functionality.** Getting it right requires attention to many factors, including security, customer experience, network performance, and application development and deployment. Automation, reporting, and policy-driven controls provide the key to enabling IT to adopt radically new processes and technologies using limited budget and resources.
- **Focus on security,** particularly new challenges associated with supporting diverse endpoint devices and protecting critical confidential data stored in the cloud. Security is one of the key success factors that stood out in our surveys, and enterprises must ensure that they have sufficient focus both for compliance reasons and to ensure that levels of customer trust are upheld.

“[We need to] be able to control the data – the corporate data that’s in there – but not fully lock down the device so the user can keep it open to put their own personal things on it.”

– Major real estate firm

“These platforms were not designed with this intent in mind. They are relatively weak when it comes to management from an information security perspective. They were meant for consumers, not for enterprises. So now we’re left to... fill the gap.”

– Major financial services firm

Conclusion

The consumerization of IT is upon us, and like many past revolutions, it brings risks and opportunities. The proliferation of public cloud, mobile, and social technologies in the enterprise presents new opportunities and challenges to IT organizations and the business units they support. IT organizations that can get ahead of the curve can help their businesses achieve consumer scale, open new business models, and provide new opportunities for businesses to interact with their customers.

In this global study of IT consumers and enterprise IT executives, IDC found that most IT organizations are poised for adoption, with 19% of organizations, the leaders, currently proactively adopting these technologies. These leading organizations are more likely to realize strategic business benefits from these technologies, more likely to use public cloud as a way to optimize their resource allocation, and most focused on solutions that improve their automation, management, and security. IDC recommends that IT organizations take a page from these leaders and adopt the tools, processes, and infrastructure to fully embrace consumer technology adoption in the enterprise. IDC believes that this approach will enable organizations to improve agility, gain competitive advantage, and better achieve consumer scale.



Methodology

The information for this white paper came from two global surveys plus a focus group of IT executives, all of which were conducted in March and April 2011. IDC surveyed 804 IT executives from organizations of over \$1 billion in revenue with responsibility for or influence over their organization's strategy for public cloud, social, and mobile initiatives. A separate survey consisted of 1,040 IT consumers who use public cloud, smart mobile devices, and/or social networks for personal or business purposes. To qualify, respondents had to be fully employed and over 17 years of age and use a PC or other mobile device for personal and/or work purposes.

Respondents in both surveys were randomly recruited and screened from international panels and came from eight countries: the United States, China, Germany, France, the United Kingdom, India, Brazil, and Singapore. Global data was derived by weighting the IT executive survey by country GDP and the IT consumer survey by online population. Both surveys were conducted over the Internet and administered in the local language.

These surveys were supplemented by a focus group of 10 U.S. IT executives responsible for new technology adoption and support, drawn from organizations from a range of industries and with revenue over \$2 billion. Representative titles included Senior Vice President, Global IT; Director of IT; Director of IT Operations; Vice President of Technology and Operations; and Vice President of IT. The focus group was conducted in New York in April 2011.

About IDC

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