

# BYOD and Virtualization

## Top 10 Insights from Cisco IBSG Horizons Study

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## Introduction

Like it or not, enterprises have entered a “post-PC world,” where the network must accommodate new choices at every layer of the stack. These include traditional, mobile, and social applications and operating systems; various server architectures; and an array of mobile devices ranging from smartphones to tablets and other mobility tools. Cisco’s Internet Business Solutions Group (IBSG) conducted extensive research and analysis to uncover key insights about BYOD (“bring your own device”) and desktop virtualization trends in U.S. enterprises. The Cisco IBSG Horizons BYOD and Virtualization study surveyed 600 enterprise IT leaders from 18 industries. This paper offers an overview of the top 10 insights.

It’s important to note that BYOD is merely the “tip of the iceberg” when it comes to gaining the full benefits of mobility. Many other elements also come into play (for example, cloud will assume a key role in fulfilling the promise of BYOD). However, BYOD and desktop virtualization are already having a significant impact on the enterprise – a trend that is certain to grow in the months ahead.

Seventy-eight percent of U.S. white-collar employees use a mobile device for work purposes.

### Insight No. 1: Mobility Is Pervasive

- Seventy-eight percent of U.S. white-collar employees use a mobile device (e.g., laptop, smartphone, tablet) for work purposes.
- Respondents indicated that 65 percent of white-collar workers in their organizations require mobile connectivity to do their jobs.
- Forty-four percent of knowledge workers telecommute at least once per week.
- Cisco IBSG estimates that telecommuting once a week saves \$2,500 per employee annually.

By 2014, the average number of connected devices per knowledge worker will reach 3.3.

Among respondents, the top two perceived benefits of BYOD were improved employee productivity and greater job satisfaction.

### Insight No. 2: Growth of Mobility Has Impacted IT Profoundly

- By 2014, the average number of connected devices per knowledge worker will reach 3.3, up from an average of 2.8 in 2012 (18 percent increase).
- On average, mobility initiatives will consume 20 percent of IT budgets in 2014, compared to 17 percent in 2012.

### Insight No. 3: How Much Longer Will Traditional Funding Models Exist?

- Sixty-two percent of respondents' organizations pay for both employees' devices and their voice/data plans.
- Seventy-five percent of respondents expect the share of employee-owned devices connected to company networks to increase "somewhat" to "significantly" over the next two years.
- Forty-one percent of respondents indicated a majority of smartphones connecting to their company network are actually employee-owned.
- According to Cisco IBSG, employees are willing to invest to improve their work experience. Cisco BYOD employees, for example, pay an average of \$600 for their preferred devices.

### Insight No. 4: BYOD Is Here, and It's Not a Bad Thing

- Eighty-eight percent of surveyed IT leaders perceive growing technology "consumerization" in the enterprise.
- Seventy-six percent consider consumerization "somewhat" or "extremely" positive for their companies.

### Insight No. 5: BYOD Delivers Several Benefits to the Enterprise

- Among respondents, the top two perceived benefits of BYOD were **improved employee productivity** (more opportunities to collaborate) and **greater job satisfaction**.
- The benefits of BYOD vary based on an employee's role and work requirements. Cisco IBSG estimates that the annual benefits from BYOD range from \$300 to \$1,300, depending on the employee's job role.

Respondents cited the top challenges of BYOD as (1) ensuring security / privacy of company data and (2) providing IT support for multiple platforms.

Forty-one percent of respondents cited “device choice” as their top BYOD priority (the ability to use their favorite device – anywhere).

### Insight No. 6: BYOD Does Bring Its Share of Challenges

- Respondents cited the top challenges of BYOD as (1) **ensuring security/privacy** of company data and (2) providing **IT support** for multiple mobile platforms.
- Thirty-six percent of respondents said that their organizations’ IT departments provide full support for employee-owned devices connected to the company network, with an additional 48 percent indicating that their IT departments support selected devices. Eleven percent said that their companies tolerate employee-owned devices but don’t support them, and just 5 percent said their organizations forbid employee-owned devices.
- According to Cisco IBSG, 86 percent of BYOD costs are non-hardware-related, highlighting the importance of choosing the right governance and support models to control these costs.

### Insight No. 7: Employees Want To Control Their Work Experience

- Employees are turning to BYOD because they want more control of their work experience, thus improving productivity and job satisfaction.
- Forty percent of respondents cited “device choice” as their top BYOD priority (the ability to use their favorite device – anywhere).
- Respondents’ second BYOD priority is the desire to perform personal activities at work, and work activities during personal time.
- Employees also want to bring their own applications to work. Sixty-nine percent of respondents said that unapproved applications – especially social networks, cloud-based email, and instant messaging – are somewhat to much more prevalent today than two years ago.

### Insight No. 8: Desktop Virtualization Is on the Rise

- Desktop virtualization enables employees to enjoy a similar experience across a broad range of devices – from desktop and laptop PCs to smartphones and tablets. This capability is alternately referred to as virtual desktop infrastructure (VDI), hosted virtual desktop (HVD), desktop as a service (DaaS), and server-based computing.
- Eighty percent of respondents indicated that they are “very aware” of desktop virtualization, and 18 percent said they are “somewhat aware.”

- Sixty-eight percent of respondents agreed that a majority of knowledge worker roles are suitable for desktop virtualization.
- Fifty percent noted that their organization is in the process of implementing a desktop virtualization strategy.

### Insight No. 9 Desktop Virtualization Also Poses Challenges

Sixty-eight percent of respondents agreed that a majority of knowledge-worker roles are suitable for desktop virtualization.

- While 70 percent of IT leaders recognize that *half or more* of their organization's employees could benefit from desktop virtualization, they also expressed some concerns.
- Respondents' top concern (33 percent) was data protection – ensuring that only the right people have access to sensitive company and customer data. The No. 2 concern was business continuity – the ability to continue operations under adverse conditions, such as interruptions due to natural or man-made hazards.

### Insight No. 10 Desktop Virtualization Will Impact Much of the Business

Survey respondents noted the following as the three areas that will benefit most from desktop virtualization: (1) business continuity, (2) employee productivity, and (3) IT costs.

- Desktop virtualization is already making its mark and will continue to have a significant impact on enterprise business. Survey respondents noted the following as the three areas that will benefit most from desktop virtualization: **(1) business continuity, (2) employee productivity, and (3) IT costs.**
- Among devices, respondents listed their top desktop virtualization priorities as laptops (81 percent), desktops (76 percent), smartphones (64 percent), and tablets (60 percent).
- Survey respondents stated that the top four job roles being targeted for desktop virtualization are (1) field-/customer-facing employees, (2) employees who handle sensitive company data, (3) employees who work from home frequently, and (4) executives.
- Desktop virtualization and BYOD are changing the way applications are provisioned to employees. For example, 35 percent of respondents said that employees can download only preapproved applications from the company app store, while 23 percent indicated that both approved and nonstandard applications are available from the company app store.

### About Cisco IBSG Horizons

Horizons is a multimodal research and analysis program designed to identify business transformation opportunities fueled by technology innovation. Horizons' multimodal approach focuses on three core areas: (1) primary research such as customer surveys, focus groups, and subject-matter-expert interviews; (2) in-depth secondary research from market leaders and influencers; and (3) the application of predictive analytics to garner insights about technology innovations and quantify their impacts.

For more information about the Cisco IBSG "BYOD and Virtualization" Horizons study, please contact:

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### More Information

Cisco Internet Business Solution Group (IBSG), the company's global consultancy, helps CXOs from the world's largest public and private organizations solve critical business challenges. By connecting strategy, process, and technology, Cisco IBSG industry experts enable customers to turn visionary ideas into value.

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