

Chapter 1:

How to build a consumerization of IT strategy

Microsoft recommendations for a consumerization of IT strategy

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[Chapter 2: Considerations for a Successful Consumerization of IT Structure](#)

Abstract:

This document introduces the phenomenon known as the consumerization of IT, which encompasses the proliferation of consumer devices in the workplace, the drive to interact more naturally with devices, social computing, and cloud computing. The value of adopting a consumerization of IT strategy includes increased employee productivity and job satisfaction. A variety of device options support consumerization of IT strategies, although enterprises must consider the tradeoffs between employee choice and enterprise control that such options present.

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Document readership:

This white paper is intended for a high-level, non-technical audience of business/IT decision makers and stakeholders from human resources, finance, legal, and other business areas. This white paper supports Microsoft enterprise architects who participate in strategic discussions regarding consumerization of IT initiatives, and provides intellectual property content that may be excerpted, customized, and reassembled as appropriate.

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1 Overview

As technology becomes more central in people's personal lives, consumer technologies have been steadily entering into the workplace and increasingly blurring the lines between home and work. This trend, known as the consumerization of IT, has the potential to play a significant role in improving business productivity and agility for enterprises.

The consumerization of IT helps organizations realize increased productivity and enhance workforce capabilities, while maximizing IT investments.

This white paper presents:

- **An introduction to the consumerization of IT.** This description discusses general industry drivers and the Microsoft perspective about mobile workforces and the consumerization of IT.
- **The value proposition of adopting a consumerization of IT strategy.** Benefits include increased employee productivity and satisfaction.
- **Enterprise device options.** This section highlights the trade-offs between agility and control (business-centric versus IT-focused decisions).

This white paper is one part of the "Microsoft Recommendations for a Consumerization of IT Strategy" series. This series introduces the phenomenon known as the consumerization of IT, including strategies for supporting the proliferation of devices in the workplace and supporting work tasks on personal devices at diverse locations.

The full list of white papers that comprise this series is:

- "How to build a consumerization of IT strategy" (this paper)
- "Considerations for a successful consumerization of IT architecture"
- "How the consumerization of IT affects your business"
- "Security and governance strategies for the consumerization of IT"

2 Introduction to the consumerization of IT

The consumerization of IT emphasizes the ways an organization can manage the control that employees are seeking over their own activities. The consumerization of IT is a strategy that leads to tangible business benefits by addressing employees' increasing demand for control within an enterprise IT environment while also supporting an organization's need to securely deploy and manage a variety of consumer devices, applications, and services.

2.1 Industry trends driving consumerization of IT strategies

With new intuitive touchscreen devices such as smartphones and tablet computers entering the marketplace every month, social networking tools are becoming integrated into our daily lives. In addition, because the cloud now provides storage for music, pictures, and email, a variety of media and social networking apps are quickly entering the workplace environment.

As workers bring their own devices into the workplace, the line between work and personal life blurs. Employees increasingly want to use a single device in the workplace and at home. Technological advances are enabling workers to connect, work, and be productive anytime and anywhere, but many organizations are wondering how to embrace and reap benefits from the change and still maintain control.

2.1.1 Proliferation of devices

The proliferation of consumer devices combined with employees who are increasingly knowledgeable and technologically motivated has resulted in increased expectations of technology capabilities at work. Many users have multiple personal computing devices, and industry analysts expect the number of devices in use globally to double in the next few years. Tech-savvy users are also increasingly mobile, and operate in fast-paced environments. These dynamic environments, along with ubiquitous connectivity, erode the lines between people's personal lives and work. As the lines continue to blur, people's personalities and individual work styles have an increasing impact on how they get their work done and what technology they prefer to use.

2.1.2 Natural ways of interaction

There are new ways of interacting with emerging technology, including touch, speech, and using gestures. This trend will see computers shift from being tools to becoming helpers that are programmed to perform tasks on the user's behalf—tasks that can be performed based on awareness of the current environment and the context of user actions. This trend will encourage the development of computing interfaces that are far more natural and increasingly simple to use, which will help eliminate the learning curve of today's technology. An increasing number of consumers are finding themselves drawn to devices that use such natural means of interaction, and as a result, more people are bringing these devices into the workplace.

2.1.3 Social computing is changing the way people interact

Social computing has already changed how people make and maintain connections. Social networking is becoming mainstream in people's personal lives, but the current lack of integration in the workplace creates frustrating disruption when users are forced to switch between services, applications, and devices. As a result, there is a trend of more workers using social computing as an unofficial way to stay in contact with former colleagues, search for potential candidates, and keep up-to-date on industry trends.

2.1.4 Cloud computing is enabling the consumerization of IT

Cloud computing delivers virtually infinite resources, as well as a platform for orchestrating the flow of information and technology across users' lives so that they always have instant access to the tools and information that they need, regardless of location or device in use. Computing breakthroughs will enable the detection of data patterns that can support better decision making. Emerging cloud services such as rich Internet applications, social platforms, and IT management services are enabling enterprises and individuals to enjoy the benefits of consumerization.

2.2 Microsoft vision for the consumerization of IT

As people interact with devices in more natural ways, through touch, speech, and gesture,¹ applications are becoming more fluent across devices, the Internet, and the cloud. Data is flowing across those platforms and delivering a consistent experience, enabling people to work independent of time and place.

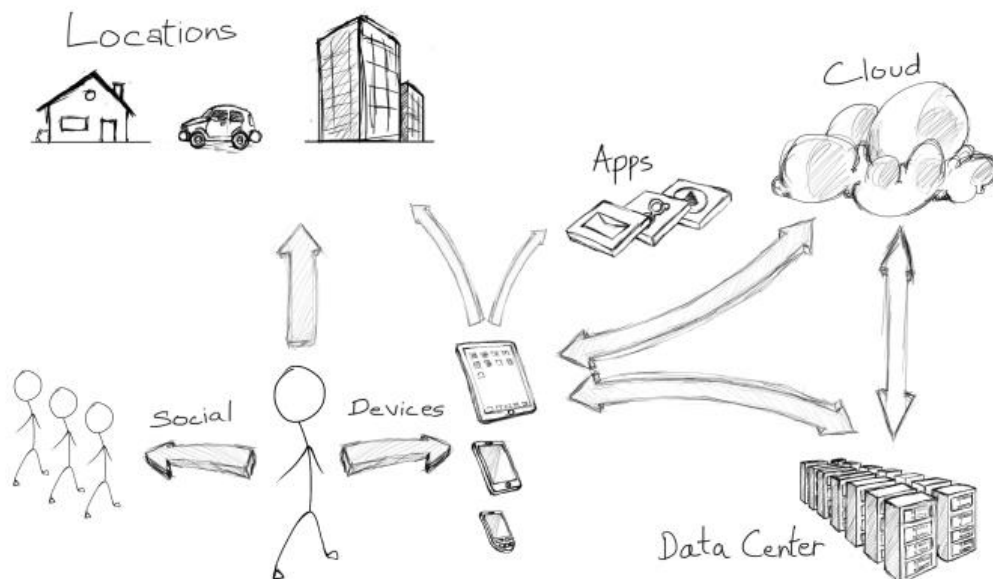


Figure 1. Sketch of the Microsoft vision for the consumerization of IT

People will soon be using many devices to get work done, and interaction between people will change through the social capabilities provided by the new technologies entering into the enterprise.²

2.2.1 People become mobile

People have become mobile across locations and through time. During the last decade, working remotely has become increasingly prevalent. Many of the world's leading organizations, including British Telecom, Procter & Gamble, Microsoft, IBM, and Accenture have already partially or fully eliminated traditional offices. This trend will accelerate in the coming decades in response to the ongoing

¹ Natural User Interface: "[Exploring human-centric ways for people to interact with future computing paradigms](#)," on the Microsoft Research website.

² "[Microsoft outlines vision for combining Windows and Windows Phone](#)" article about a speech by Andy Lees at Worldwide Partner Conference 2011. A transcript of the speech is available [here](#).

globalization of work, ever-increasing customer demands, and the cost and time of commuting. At the same time, remote employees as well as managers are becoming increasingly aware of the challenges associated with virtual work with regard to internal communication, social interaction, and employee satisfaction and commitment.

People are also becoming mobile workers because of the large demand for independent workers, changing the way jobs and careers are considered. Recent entrants to the workforce are seeking opportunities as vendors, thus controlling their own future. For enterprises, this change creates the opportunity to tap into a “people cloud” of flexible workers and respond more quickly to market demands.

2.2.2 Devices become mobile

Devices have become mobile through advances in electronics and digital technology. These advances have enabled the development of smaller devices that have more computing power, less power consumption requirements, and relatively low costs. Smartphones equipped with multi-core processing units and media tablets that easily fit into a handbag are the results of these advances. Such features are driving consumer demand and carrier support.

Applications have become mobile through advances in software technology. Advances in operating systems and virtualization are enabling application portability so that applications can operate across devices and in the cloud. Advances in web technology, such as HTML 5, enable rich Internet applications that are accessible from a wide range of devices. Applications can follow the user, regardless of the platform, operating system, or the device.

2.2.3 Data becomes mobile

Data has become mobile through advances in connectivity, broad availability of wireless networks, and mobile networks across the globe. Data flows between devices and cloud services, which provides a common view to the user from different devices and locations.

3 Value proposition for adopting a consumerization of IT strategy

Consumerization of IT strategies provide user-focused value to enterprises, highlighting productivity, availability, job satisfaction, and workforce retention. Modern employees demand choice in how they execute their jobs, and employers can use the consumerization of IT as an attractive, differentiating factor when recruiting.

In addition, consumerization of IT strategies relieve IT personnel of many non-strategic activities, such as device purchasing, device handling, asset management, and provisioning. These operations can be performed outside the organization and reduce operational expenses.

Although adopting a consumerization of IT strategy provides many benefits, it also introduces risks that must be addressed. Designing a roadmap that includes methods for managing digital assets, security, and governance will provide the value of improving the security infrastructure of an enterprise.

The next section of this paper will help enterprises make a balanced decision regarding benefits versus risks.

4 Enterprise device options: Choice versus control

The essence of the consumerization of IT strategy is to provide choice while maintaining a necessary level of control of enterprise assets, such as devices, applications, and data. When the number of platforms increases, costs for device management and application development increase.



Figure 2. Consumerization of IT framework

The trade-offs between the amount of choice and the required level of control (management by the enterprise) is summarized in the following figure.

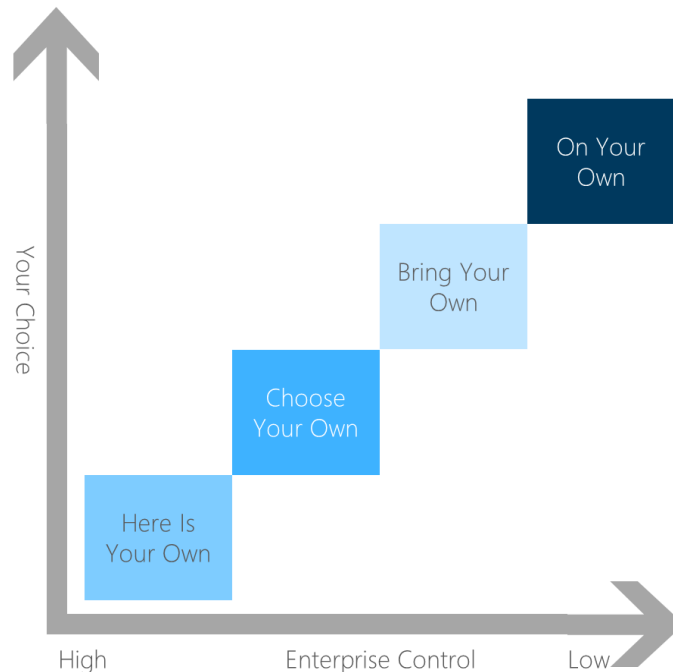


Figure 3. Consumerization (choice) versus control by the enterprise

4.1 *Here Is Your Own*

Here Is Your Own is the enterprise strategy that does not give employees a say regarding device selection. The enterprise chooses a device and provides end-to-end support. This practice developed because of the significant cost savings when purchasing PCs in bulk, and is characterized by the strict policies that IT imposes on the use of the devices.

Failure to modernize equipment and keep pace with powerful consumer devices causes employee frustration, and inspires enterprises and their employees to pursue consumerization of IT strategies that will enable them to use their own devices.

4.2 *Choose Your Own*

Choose Your Own is a strategy that allows choice from a standardized list of hardware and software that the enterprise likely purchases in bulk from vendors. Policies regarding employee customization are generally loose, allowing employees to install and customize software and consequently their working environment.

This strategy depends on the enterprise to accurately identify use scenarios and choose devices that fulfill these scenarios. However, device choices remain largely based on cost, and procured devices do not necessarily address the specific needs for employees or work functions.

4.3 *Bring Your Own*

Bring Your Own strategies have been experimented with in the past and today are becoming more popular, with vendors promoting the business benefits of this approach. The enterprise provides a stipend to allow employees to buy a device at a retail store (for example, Best Buy in the United States or Media Market in Europe) with some kind of a support contract.

By accepting the stipend, employees agree to refrain from calling the enterprise support desk about problems with their chosen devices. Policies are loose; if employees use antivirus/antimalware software, they can install and customize their own software and environment.

Microsoft IT supports this model: privately owned PCs can be imaged with a Windows image that Microsoft IT supplies, which gives employees the option of using a more powerful or fashionable device of their choosing.

4.4 *On Your Own*

On Your Own strategies allow complete freedom, enabling users (for example, students on a university campus) to bring any device. This model is often applied in creative or innovative companies or small-to-medium-sized business.

An enterprise will provide no support for these devices, saving the costs of handling hardware, procurement, and provisioning. The advantages for enterprises are the elimination of hardware handling, procurement, and provisioning costs. Disadvantages include a rise in hidden/shadow IT costs, and incompatibilities in collaboration tools and methods. Also, people's productivity may be reduced while performing device setup and maintenance.

5 Conclusion

Today, employee personalities and individual work styles increasingly affect the technologies they use to get their work done. People are beginning to use multiple devices of choice to accomplish their work, and interaction between people is changing through social capabilities provided by new technologies entering the enterprise.

Consumerization of IT strategies provide user-focused value to enterprises because they highlight productivity, availability, job satisfaction, and workforce retention. Enterprises are considering how to embrace and reap benefits from the change while maintaining control over corporate services and information assets.

From the perspective of an employee, the consumerization of IT should provide a consistent user experience on a range of devices with differing capabilities. From the perspective of IT, a consumerization of IT strategy must support manageable IT workloads, despite the variety of devices used within the enterprise.

Microsoft is uniquely positioned to help enterprises embrace the consumerization of IT through a compelling and consistent user experience across multiple platforms. Microsoft also provides the infrastructure components to manage platform diversity to satisfy enterprises' business needs as well as their IT needs.

5.1 *Microsoft technology offerings support consumerization of IT strategies*

Microsoft can help enterprises embrace emerging consumerization of IT strategies in four key areas:

- **Windows-based devices.** The diverse range of devices based on the Windows platform enables enterprises to address enterprise requirements while delivering a compelling and consistent user experience for work and life.
- **Productivity.** The wide range of productivity offerings, including server-based products such as Microsoft Exchange and Microsoft SharePoint and the cloud-based Office 365 platform, enables enterprises to deliver a great productivity experience while maintaining appropriate security, privacy, and compliance safeguards.
- **Application development.** A development platform that simplifies and enriches the developer experience within a familiar development framework with tools that target Windows, mobile devices, and multiple web platforms. In addition, Microsoft provides a cloud platform that enables enterprises to address their business requirements in an efficient and agile way.
- **Security and management.** The ability to manage multiple device types within a single interface via existing management tools within enterprise infrastructures or from cloud services.

Enterprise architects can also highlight the following Microsoft services that support the development of consumerization of IT strategies:

- **Assessment.** Assistance in mapping business requirements to application development efforts to achieve business goals.
- **Sales force mobilization.** Assistance in assessing and enhancing effectiveness of sales forces using mobile devices.
- **Microsoft apps for business.** App store featuring apps for typical business scenarios that provide quick returns on consumerization of IT investments.
- **Custom app creation.** Help creating business apps that are tailored for an industry or an enterprise.
- **App life cycle management.** Ensure continued interoperability of apps with new versions of consumer platforms.

6 References

This white paper refers to the following sources.

- Natural User Interface: “Exploring human-centric ways for people to interact with future computing paradigms,” on the Microsoft Research website
 - <http://research.microsoft.com/en-us/collaboration/focus/nui/default.aspx>
- Tom Warren, WinRumors. “Microsoft outlines vision for combining Windows and Windows Phone” (also available from Microsoft website) article about a speech by Andy Lees at Worldwide Partner Conference 2011
 - www.winrumors.com/microsoft-outlines-vision-for-combining-windows-and-windows-phone/
 - A transcript of the speech is available at:
www.microsoft.com/presspass/exec/lees/07-12-11WPC2011.msp

7 Resources

The following resources provide additional information that might be of interest to the reader.

- “Set Up Remote Workers to Thrive,” Mulki, Jay, et al.
 - <http://sloanreview.mit.edu/the-magazine/2009-fall/51116/set-up-remote-workers-to-thrive/>
- “The Freelance Surge is the Industrial Revolution of Our Time”
 - www.theatlantic.com/business/archive/2011/09/the-freelance-surge-is-the-industrial-revolution-of-our-time/244229/
- “IDC Forecasts Worldwide Smartphone Market to Grow by Nearly 50% in 2011”
 - www.idc.com/getdoc.jsp?containerId=prUS22762811
- IDC 2011 Consumerization of IT Study: “Closing the ‘Consumerization Gap’” PDF file
 - www.unisys.com/unisys/common/download.jsp?d_id=1120000970016710178&backurl=/unisys/ri/report/detail.jsp&id=1120000970016710178
- “Best Practices for Supporting ‘Bring Your Own’ Mobile Devices.” Jones, Nick; Leif-Olof Wallin. Gartner, 2011.
 - www.gartner.com/id=1752515
- Flexible Workstyle Campaign
 - www.microsoft.com/en-gb/windows/enterprise/default.aspx
- “Windows 7 Training Makes Cents” posting on the Premier Support Ireland site on TechNet
 - http://blogs.technet.com/b/premier_support_ireland/archive/2011/12/29/windows-7-training-makes-cents.aspx

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