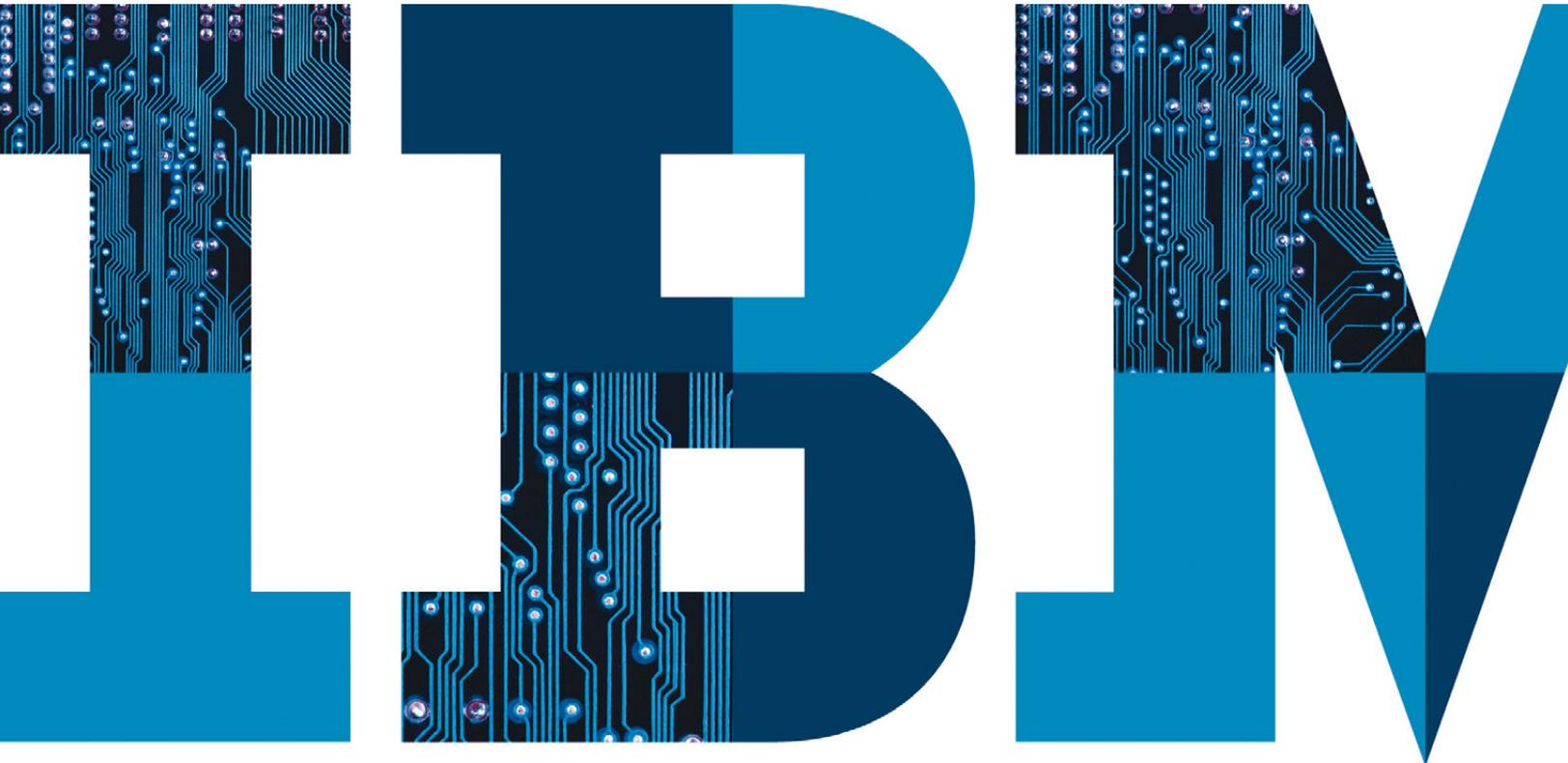


The new workplace: are you ready?

How to capture business value



Contents

- 2 The new workplace at a glance
- 2 Trends and challenges
- 5 Transforming the workplace through technology
- 8 The road to capturing value
- 10 Best practices
- 10 The big reward
- 11 How IBM can help
- 11 For more information

The new workplace at a glance

Change is the only constant. New technologies and a new generation of mobile, connected workers are creating an entirely new way of working, with implications that can be felt from the corner office to the home office. Cloud computing, collaboration and mobility technologies have reached critical mass and are creating a crucial inflection point for businesses of all sizes in all industries. Organizations that adapt—and adapt now—stand ready to reap the rewards in the form of new opportunities and a newly honed competitive edge.

Challenges posed by this new way of working can be met by embracing the elements of the new workplace within the enterprise's overall strategy, organization, processes and technology. This white paper provides a practical point of view and proven solutions based on IBM's own enablement of the new workplace—and how IBM has helped its clients. Business and IT executives who adopt a similar approach can help their organizations create a connected, mobile and agile workplace that delivers clear business value for today and the future.

Trends and challenges

According to the Merriam-Webster Dictionary, the traditional definition of workplace is “a place (as a shop or factory) where work is done.”¹ Today, the place where work is done has changed, and a new definition is needed:

Today's workplace is a virtual and/or physical environment, characterized by connections, collaboration and user choice, that enables the worker to be more agile and perform activities anywhere, anytime—ultimately creating greater enterprise value.

This new workplace definition is the result of industry trends in technology and work habits, and poses important challenges for the organization supporting the workplace.

Industry trends

Today's up-and-coming generation of workers meet, share, discover and get work done via technology—and they expect the technology tools they have embraced in their personal lives to play an important part in their business lives, as well.

People used to go to work, now work goes to people—whatever work needs to be accomplished, anytime it needs to get done, on a multitude of devices.

- Over 290 million smartphones shipped in 2010, and this number is expected to grow at 23 percent through 2014.²
- Individuals bringing their own smartphone into the workplace will account for 62 percent of business-use smartphones in 2014.³
- Within six years, workers will spend an estimated 80 percent of their time collaborating.⁴
- More than 50 percent of U.S. workers use social media for business purposes at least once a week.⁵
- Employees now give telecommuting and flexible work hours a 7.7 out of 10 for contribution to job satisfaction.⁶

Key challenges

For many organizations, enabling and supporting today's agile and connected workplace comes with a set of important challenges.

- *Complexity*: More devices mean more systems to coordinate, more applications to support, more connections to be maintained.
- *Security and compliance*: Organizations now need to assure security of data and intellectual property—and compliance with corporate, regulatory and governmental rules—over a greatly expanded range of network connections. Also of concern are maintaining security and compliance, and separation of personal and enterprise data, on smart devices owned by individual workers, along with collaboration that takes place in online public forums.
- *Cost management*: As complexity and device choice grows, organizations need to find more cost-effective ways to supply the needed infrastructure.
- *Loss of control*: Organizations need new ways to maintain and increase service levels, while delivering services to more devices than ever.
- *Support*: Organizations are under increasing pressure to support the devices workers are choosing to work with and the new ways workers expect to access that support, such as self-help, communities and automated support.

The new workplace dimensions

Organizations must address the new workplace challenges across all dimensions of the enterprise.

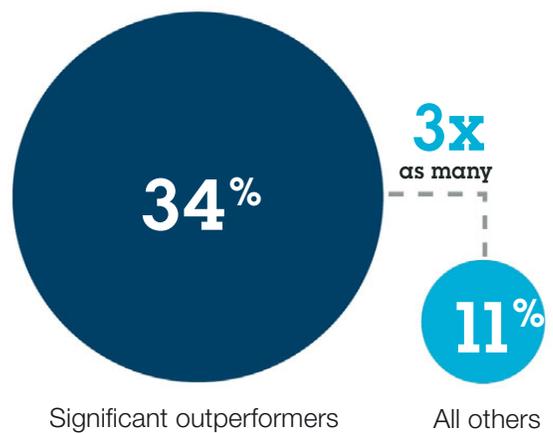
- *Strategy:* The workplace strategy, vision and goals are transforming from an afterthought of the business and IT strategy to an imperative of the enterprise's growth and productivity objectives.
- *Processes:* The processes, information, and application workloads are transforming from siloed to cross-functional. Workers will use search and social networks and collaboration tools to find help from the web or repositories or forums or other users. Constant business analytics, historical and predictive, will need to be readily available on mobile and other devices.
- *Organization:* The organizational structure, roles, responsibilities, culture, and management systems are transforming from static to agile. Workers will be able to perform tasks anywhere, anytime.
- *Technology:* The technology, in particular end-user devices, is transforming from corporate-mandated PCs to a bring-your-own-device model. The underlying technology infrastructure is changing from a fixed to a virtual environment creating virtual desktops, with applications and information being hosted at centrally managed locations versus being managed at the desktop.

Aiming for the bull's-eye

As for the outcome: a recent study by the IBM Institute for Business Value has revealed that organizations that are significantly outperforming their peers also happen to be those making the most headway on newer approaches to work.⁷

Extensive adopters of smarter working practices*

Compared to other companies, outperformers are more than three times as likely to have adopted smarter working practices



* Companies scoring "high" or "very high" across all of the elements of at least one smarter working dimension (dynamic, collaborative or connected).

Source: IBM Institute for Business Value "A new way of working"

Figure 1: A recent IBM study reveals that three times as many industry outperformers have extensive implementations of smarter working practices—a key facet of the new workplace.

Transforming the workplace through technology

From a technology viewpoint, the new workplace is characterized by connections, collaboration and mobility. Using standards, software as a service and cloud techniques, applications, operating systems and devices will no longer all be forced to upgrade together when one part is upgraded. Users will have greater access to self-service IT options and, more importantly, communities of other users for advice, help and wisdom. Devices will be an open mix of smartphones opportunistically connecting to nearby wireless peripherals ranging from printers to docking stations to television screens.

All of this will be driven by three main technology models: bring your own device, unified communications and the cloud.

Bring your own device

According to Nielsen Research, one in two Americans will own a smartphone by the end of 2011, compared to just one in ten in 2008.⁸ Workers are utilizing multiple devices to collaborate, communicate—in fact, work—and organizations are implementing a broad-based shift from supplying the devices of work to allowing (even requiring) workers to supply their own. This policy has come to be known as “bring your own device,” or BYOD.

The BYOD policy offers significant benefits to both the organization (reduced costs and concerns about device obsolescence) and the workers (enhanced flexibility and productivity, along with the ability to port personal skills to their business lives).

A BYOD policy as part of the new workplace does require, however, a corresponding shift in technology infrastructure. Systems need to be decoupled to separate data from the applications and

devices that created it. Complete leveraging of a BYOD policy may also require a shift in operating systems and an increase in server hosting of system- and application-agnostic data that can be leveraged by workers anytime, anywhere.

Security concerns need to be addressed, as well. The benefits of a BYOD policy must be balanced against the challenges of assuring that work and non-work data and applications are securely partitioned from each other in order to maintain the integrity, security and information protection needs of both organization and workers.

Workplace snapshot: worldwide hotel chain

The challenge:

Mixed global email platforms for corporate and affiliate partners, and 5,000+ end users requiring end-to-end managed mobility solutions.

The solution:

A managed and integrated solution including:

- BlackBerry® Enterprise Server Support
- Email, web and calendar support
- End-user help desk support
- Enterprise application support for smartphones.

The results:

- Total cost of ownership savings that enable 30 percent smartphone growth over five years
 - Seamless access during migration and consolidations
 - Subscription-based pricing simplifies billing and tracking and helps predict costs.
-

All communications, all in one place

Unified communications (UC) describes the integration of collaborative communications systems so that these systems are easier to use and more productive for workers. Available via a single, secure user interface, UC solutions are more intuitive to use than stand-alone solutions and are available on demand via a variety of devices.

As Figure 2 shows, UC brings together secure solutions for:

- Enterprise telephony
- Email and calendaring

- Collaborative space for applications, documents and enterprise social networking
- Cross-boundary instant messaging
- Video, web and audio conferencing.

UC solutions address many of the pressures that are being felt by organizations as the new workplace unfolds. UC can help reduce telecommunications spending and the time and expense involved in worker travel. UC helps improve worker productivity by providing an often geographically dispersed workforce with on-demand, any-device collaborative tools. UC can also enable faster response to customer needs.

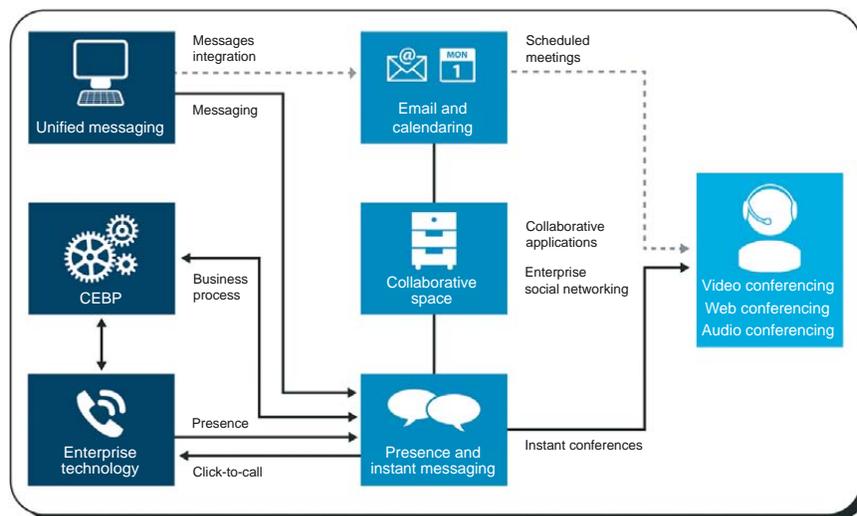


Figure 2: Unified communications (UC) brings together all the collaborative and communicative tools a worker needs in the new workplace, all in a unified, real-time virtual workspace.

Workplace snapshot: global pharmaceuticals company

The challenge:

A large workforce of sales representatives constantly on the move, needing integrated access to collaborative tools and corporate data.

The solution:

Via their BlackBerry smartphones, sales representatives now have instant, anywhere access to:

- Email and text messaging
- Corporate sales and product data
- Instant messaging
- Phone
- Internet and corporate intranet.

The results:

- Consolidated technical, administrative, licensing and support
 - Monthly, per-user pricing
 - Reduction in total cost of ownership of 30 percent compared to previous approach.
-

Work in the cloud

Because of the collaborative nature of the new workplace, participants need a common venue within which to interact. Increasingly, this interaction will take place in the cloud. For the purposes of the new workplace, the cloud may be thought of as a large and inclusive system, encompassing Internet and intranet, social computing, mobility, broadband, telepresence and virtually hosted systems.

Organizations have made strides in leveraging cloud models for data center storage and business resiliency and recovery. There is more that the cloud can do to help enable the new workplace. Desktop cloud implementations make desktop-persistence possible—providing the end user with the same desktop view and capabilities no matter what device the worker is using at any given time. The cloud can be the vehicle for delivering integrated collaborative tools, as well.

Security and compliance can be enhanced within cloud implementations. Security policies can be applied across the cloud implementation, and processes for identification and authorization can be automated. Compliance data can be collected and analyzed in near real time.

Workplace snapshot: Bank of Tokyo-Mitsubishi UFJ

The challenge:

As Japan's premier bank, the Bank of Tokyo-Mitsubishi has found itself renewing leasing contracts for tens of thousands of PCs every three-and-a-half years, at ever increasing cost. The bank turned to IBM for an alternative.

The solution:

In concert, the bank and IBM determined that replacing the bank's full-client PCs with thin clients could provide the bank with cost savings in the areas of hardware, software, maintenance and energy consumption—while maintaining access to the bank's existing applications and information.

The results:

By virtualizing its new workplace with thin clients, the Bank of Tokyo-Mitsubishi expects to support a variety of work styles, resulting in improved worker productivity and job satisfaction, while maintaining optimal security for sensitive data.

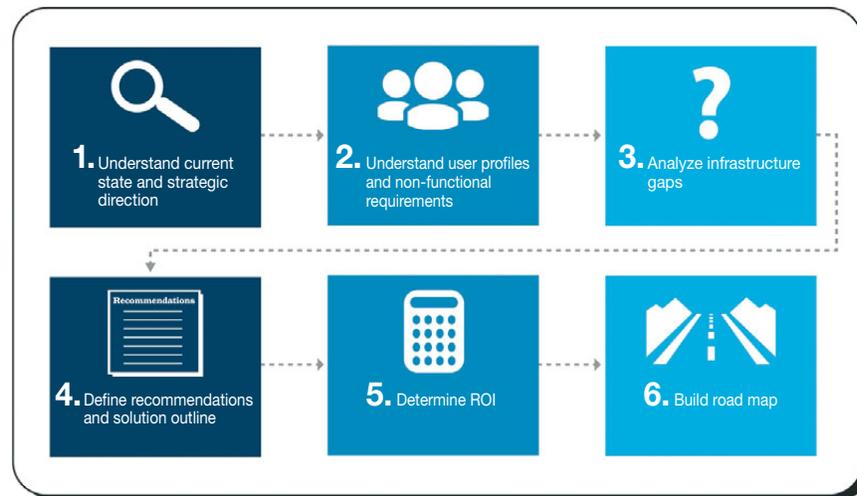


Figure 3: IBM Workplace Infrastructure Strategy and Design Services – workplace infrastructure strategy and planning provides a six-step blueprint you can use to help enable your organization's new workplace.

The road to capturing value

No matter what form your new workplace takes, technology will be the great enabler—or the great stumbling block. To help assure that your new workplace becomes reality, remember three key practices:

- *Develop a vision and strategy* for your new workplace, using the concepts discussed in this white paper, that is custom fitted to your organization and its workers.
- *Establish the funding.* A new workplace will not flourish without nourishment, in the way of funding. Funding can often be found in the new workplace implementation itself, as cost take-out that can be used to fund further transformation.
- *Draw on best practices and proven expertise* to speed implementation and optimize return on investment.

The six-step blueprint

Based on our own practical experience creating our new workplace, and the new workplaces we have facilitated for many of our clients, IBM has developed IBM Workplace Infrastructure Strategy and Design Services – workplace infrastructure strategy and planning. Designed specifically to help organizations envision and create new workplaces, this solution provides a strategy and road map for establishing an agile workplace environment with improved service levels, enhanced productivity and reduced costs, while fostering business innovations.

As illustrated in Figure 3, this solution utilizes a proven, robust six-step blueprint for achieving an agile and dynamic new workplace.

- *Step 1: Understand current state and strategic direction*
Establishes the enterprise's current IT and business environment, the direction and overall objectives. Specifically, it is important to spell out the business goals, objectives and challenges, as well as guiding principles, decision criteria and corporate vision and strategy. This will help assure that the workplace strategy best supports the IT and business strategies.
- *Step 2: Understand user profiles and non-functional requirements*
Incorporates user profiles and non-functional requirements to help plan for value-driven workplace end-user infrastructure and support services which can facilitate business innovation while helping reduce operational and capital expenses.
- *Step 3: Analyze infrastructure gaps*
Analyzes the current and planned IT capabilities by applying a comprehensive understanding of the interdependencies between the IT infrastructure, the device and growing requirements of end users and the business—as well as the benefits.
- *Step 4: Define recommendations and solution outline*
Identifies alternatives that will satisfy the needs, the gaps and the user groups. The alternatives need to be analyzed technically, financially (through return on investment) and by using the decision model. Based on that analysis, a set of recommendations is established. No matter what the enterprise's chosen strategy or current situation, there will always be different ways of moving from the current workplace environment to the new workplace. Too often, choices are made based simply on the approach with which the enterprise is most familiar. The goal of this phase is to assure that adequate consideration is given to alternative solution approaches, and that an optimum and complete solution approach is constructed based on the enterprise's current capabilities and desired outcomes.

- *Step 5: Determine return on investment*
Based on the choices made in steps 1 through 4, a high-level ROI summary helps the organization identify and prioritize the new workplace strategies that need to be implemented.
- *Step 6: Build the road map*
The road map of recommendations addresses how end users can be supported in an increasingly complex environment, phased over time for feasible adoption of the new workplace to achieve the benefits, while mitigating risk and disruption to business operations.

Workplace snapshot: IBM

The challenge:

Approximately 400,000 employees and 100,000 contractors around the world—many of them mobile or working remotely and requiring mobile, agile workplace tools.

The solution:

The short list of immediate implementations included:

- Dramatic increase in the number of employees leveraging personally owned mobile devices.
- Move to the web, including deployment of Mozilla Firefox® as IBM's default web browser and web-based email to employees worldwide.
- Lotus® Symphony™ non-charge productivity tools that make users more productive from a variety of platforms, including the cloud.

The results:

- Apple® iPhone® and iPad®, BlackBerry, Nokia® and Windows® Mobile devices have been deployed in production. Smartphones and tablets utilizing the Android™ mobile technology platform are being piloted.
 - Web conference usage has increased 207 percent between 2007 and 2009.
 - New online collaboration platforms have been embraced, fundamentally changing the way IBMers work and engage with each other, clients and partners (see IBM Social Computing Guidelines at <http://www.ibm.com/blogs/zz/en/guidelines.html>).
-

Best practices

There are some best practices, developed during IBM's enablement of the new workplace for ourselves and our clients, that can be leveraged in your initiatives. These include:

- *Get started early:* Now is the time. Technology has matured and converged to enable the workplace to become personalized, interactive, mobile and device independent.
- *Segment the workforce:* One size does not fit all. As different workers utilize different ways of working in the new workplace, segmentation has become a key part of our new workplace strategy.
- *Engage other business areas:* Technology is important—within the context of overall business. Human resources can contribute policies, guidelines and programs and develop new ways of managing a transitional workforce. Security practitioners can help assure that intellectual property is secure on a variety of devices. New training programs may need to be developed to educate the workforce and bridge generational gaps. Communications departments can develop new streams to assure that workers get the new workplace message and workplace feedback is received and processed. Business governance groups can help align IT strategy with business strategy.
- *Enable virtualization and collaboration together:* The CIO has a crucial role to play in realizing the new workplace. While the new workplace is being driven by a new generation of workers' work habits, technology is the key to enabling the processes, services and solutions that support those work habits. CIOs should focus on enabling virtualization and collaborative solutions.

The big reward

Benefits for enabling a new workplace for your organization fall into three important categories: business growth through innovation, reduced costs and increased efficiency and productivity growth via collaboration and interconnection.

Business growth through innovation

New collaborative capabilities, delivered via the cloud, will allow expansion of the workplace environment to include the contributions of employees, vendors, partners, customers, even analysts and social media influencers. Multichannel, anytime access can help improve the customer experience at every stage of the customer lifecycle. Workers' enhanced access to real-time and task-relevant information can help increase opportunities for innovative ideas to take shape and be executed.

Reduced costs and increased efficiency

Network decoupling and cloud deployment can help reduce the costs associated with network management and timely dissemination of information. Cloud deployment can also make implementing updates and patches quicker, easier and more cost-efficient. Providing data via the cloud can make data protection more robust. Increased use of open-source operating systems and applications can help drive down purchasing and licensing costs.

Productivity growth

New levels of collaboration and interconnection mean that the new workplace will better match the needs of the up-and-coming generation of workers—helping facilitate the organization's ability to attract and retain the best talent. Integrated, multidevice collaborative tools can allow for greater sharing and refinement of ideas and quicker response to actual and anticipated opportunities. Finally, IT management of worker devices can become more streamlined, effective and efficient.

How IBM can help

IBM is already putting its proven methods, practices and expertise to work helping clients large and small develop their own new workplaces—and can do the same for your organization.

IBM Workplace Infrastructure Strategy and Design Services encapsulate our extensive workplace expertise with specific planning, design and implementation solutions. A wide variety of collaborative and cloud-enablement services are also available. All solutions are designed to help reduce costs and improve overall quality of service while addressing security, privacy and governance concerns. All feature the deployment of consistent tools, measurements and service levels.

In addition, organizations can leverage the innovative benefits of industry-leading research and the cost benefits of IBM's global delivery capabilities.

For more information

To learn more about IBM's solutions for the new workplace, please contact your IBM marketing representative or IBM Business Partner, or visit the following website:

ibm.com/services/us/index.wss/itservice/imc/a1025977

To learn more about the thinking behind IBM's new workplace point of view, visit the Smart Work section of the IBM website:

ibm.com/smartwork

In the coming months, IBM will be publishing additional white papers on this topic, including the results of upcoming research with C-level executives and IT managers to capture further insights.

Additionally, financing solutions from IBM Global Financing can enable effective cash management, protection from technology obsolescence, improved total cost of ownership and return on investment. Also, our Global Asset Recovery Services help address environmental concerns with new, more energy-efficient solutions. For more information on IBM Global Financing, visit:

ibm.com/financing

About the authors

Richard Esposito

Vice President

Workplace Services, IT Strategy Services

Global Technology Services

Carl J. Kraenzel

Distinguished Engineer

Workplace Services

Global Technology Services

Christopher G. Pepin

Technology Evangelist

IBM Mobile Enterprise Services

Antony I. Stein

Global Offering Manager—End User Services

Workplace Services

Global Technology Services



© Copyright IBM Corporation 2011

IBM Global Services

Route 100

Somers, NY 10589

U.S.A.

Produced in the United States of America

April 2011

All Rights Reserved

IBM, the IBM logo, Lotus, Symphony and ibm.com are trademarks of International Business Machines Corporation in the United States, other countries or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the web at “Copyright and trademark information” at ibm.com/legal/copytrade.shtml

Apple, iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.

Android is a trademark of Google Inc.

Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries.

Firefox is a registered trademark of the Mozilla Foundation.

Nokia is a registered trademark of Nokia Corporation.

BlackBerry is a trademark of Research In Motion, Limited.

Other company, product or service names may be trademarks or service marks of others.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates

⁵ IDC Insight, “The Intersection of Web 2.0, Enterprise 2.0, and Collaboration: The Social Business,” Document # 221413, January 2010

⁶ Robert Half, *Workplace Redefined: Shifting Generational Attitudes During Economic Change*, 2010

⁷ IBM white paper, *A new way of working: Insights from global leaders*, April 2010, ibm.com/common/ssi/cgi-bin/ssialias?infotype=PM&subtype=XB&appname=GBSE_GB_TI_USEN&htmlfid=GBE03295USEN&attachment=GBE03295USEN.PDF

⁸ The Nielsen Company, *nielsenwire: Smartphones to Overtake Feature Phones in U.S. by 2011*, March 26, 2010

¹ Merriam-Webster online dictionary, © 2011 Merriam-Webster, Incorporated, <http://www.merriam-webster.com/dictionary/workplace>, March 2011

² IDC, “Worldwide Smartphone 2010–2014 Forecast Update,” Document # 226107, December 2010

³ IDC Market Analysis, “Worldwide Business Use Smartphone 2010 – 2104 Forecast and Analysis,” Document # 225054, September 2010

⁴ Smart Work on ibm.com, “How productive will we be in the future?” ibm.com/smarterplanet/nz/en/productivity_management/ideas/index.html



Please Recycle