



The Promise of Consumer Technologies in Emerging Markets


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Employees in organizations worldwide are using their Androids, iPhones and iPads—together with YouTube, Google Apps and Skype applications—to grapple with on-the-job challenges. But patterns of usage, as well as attitudes toward such technologies, differ noticeably across the globe. Employees in emerging markets, for example, not only use consumer IT at work more than their Western counterparts do; they also view such technologies as vital to enhancing their innovativeness, productivity and job satisfaction. As emerging markets seek to continue the high growth they have enjoyed over the past couple of decades, consumer technologies could be one of the key drivers of that effort.

Across Asia, Europe and the Americas, consumer technologies are finding a home away from home. Employees are increasingly using their own IT devices, such as iPads and Android phones, to solve problems within the enterprise that employs them. They use these resources in addition to—and sometimes in lieu of—tools supplied by the company.

This IT consumerization trend is being driven first and foremost by employees themselves. Influenced by their personal experiences with IT, employees perceive their own devices as more valuable, as well as easier

and more enjoyable to use, than the tools provided by their organization. Indeed, in a recently conducted study, Accenture found that a majority (52 percent) of employees worldwide are already harnessing the capabilities of consumer gadgets for business purposes. More than 23 percent are using personal consumer devices at work on a regular basis; for example, to stay connected with colleagues or customers. And 29 percent are using them at least once during an ordinary work week.

But IT consumerization doesn't stop there. In addition to consumer devices, employees are also using consumer software "apps." These applications are not part of the corporate enterprise IT portfolio but are available for easy consumption through the cloud by home users and employees alike. Google Apps,

Facebook and Skype are just a few examples of the consumer apps that employees are regularly using as work aids. From boosting personal productivity on the job, to strengthening social and business relationships, to empowering virtual communications among colleagues, consumer applications are used daily by more than 20 percent of employees worldwide, according to our survey; 29 percent use such apps at least once a week.

Distinctive usage patterns

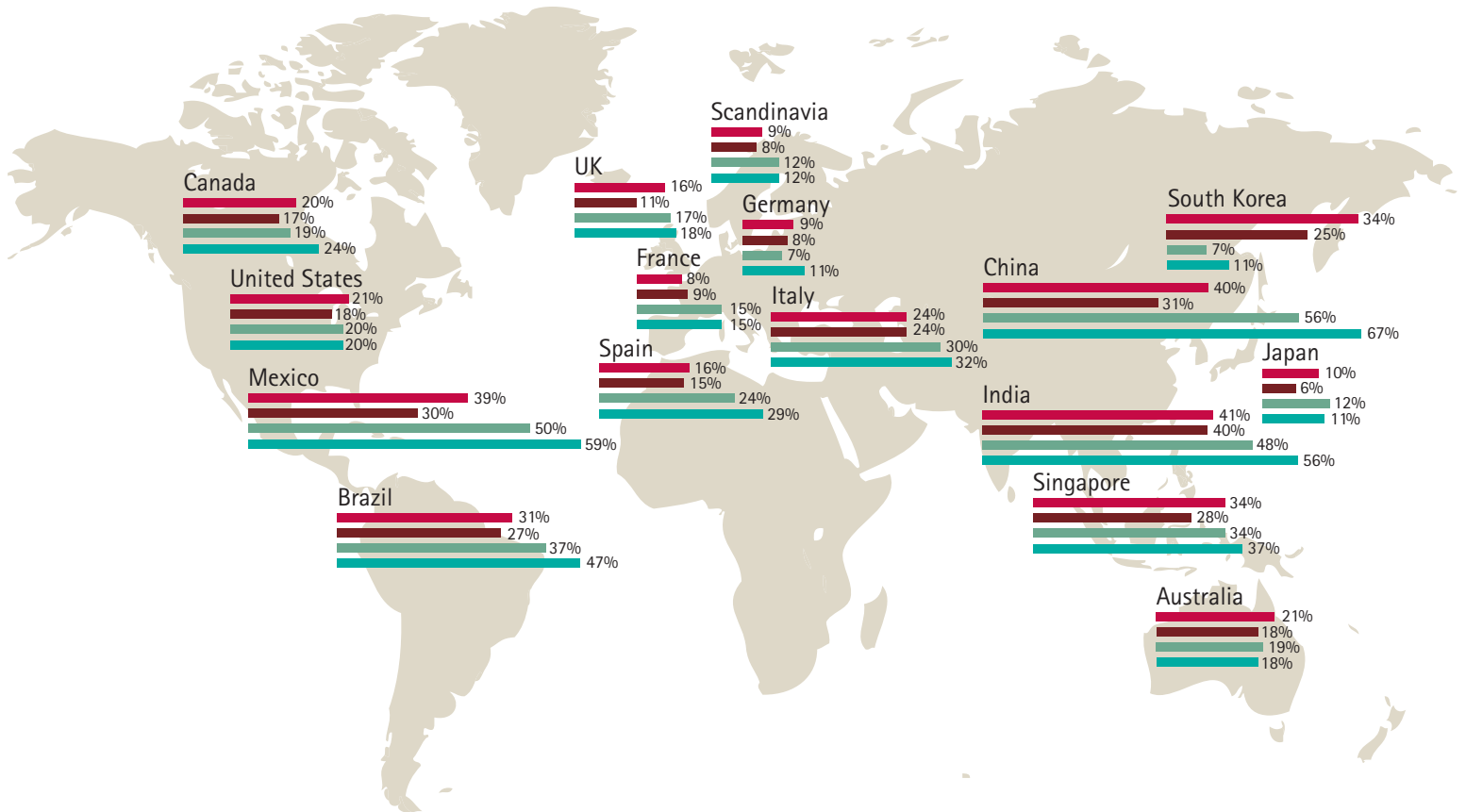
While adopting consumer technologies for work purposes is a worldwide phenomenon, it is by no means a uniform one. An Accenture research study of more than 4,000 employees from large organizations found significant differences in attitudes toward the use of consumer IT for business purposes across the globe. (See “About this study.”) Our findings also reveal that the adoption of consumer tools and applications in the workplace is more prevalent in emerging markets than in mature markets. Brazil, China, India and Mexico, for instance, show disproportionately higher consumer IT utilization in the workplace. (See Figure 1.) Even when controlling for the type and number of devices employees receive from their employer (desktops, laptops, smartphones, tablet PCs), employees in those nations are twice as likely to use a consumer technology in the workplace as their counterparts in mature economies, such as Germany or France, whose usage rates are below 10 percent.

What explains these differences in consumer IT usage patterns? One possibility is that many people in

emerging-market countries are compensating for missing out on earlier forms of communication technology, particularly landline phones and personal computers. Another is that rising income levels of a widening middle class and mass-market pricing in emerging markets have made consumer technologies particularly affordable and appealing tools in these areas—for home and work. Not surprisingly, adoption rates of consumer IT in emerging economies are accelerating. The fastest uptake in the near future, according to our study, will be in China (16 percent increase forecasted over the next three months for devices; 36 percent for applications) and Mexico (11 percent forecasted increase for devices; 29 percent for applications). The size of the population using consumer technology is already much bigger in emerging markets, and it's growing much faster than in mature markets. But in addition to these developments, differences in attitudes regarding consumer IT's value in the workplace may shed further light on the usage patterns we found.

Figure 1: Consumer IT use in workplaces around the globe

Employees worldwide are bringing their own IT—hardware and software—into the workplace. Their current and anticipated usage pattern, however, varies significantly across the globe.



Legend

- Percentage of employees that use their own consumer IT devices for work purposes often or very often
- Percentage of employees that use consumer IT applications for work purposes often or very often
- Percentage of employees that plan to use their own consumer IT devices for work purposes more often from now on
- Percentage of employees that plan to use consumer IT applications for work purposes more often from now on

Contrasting attitudes

Our study identified three fundamental differences in employees' attitudes toward consumer IT in the workplace. Specifically, employees in emerging-market economies, more so than those in developed economies, see consumer IT as a tool that can drive innovation, increase personal productivity and help companies attract and retain talent.

Driving innovation

Consumer technology's potential to drive innovation in the workplace is reflected in the variety of ways

employees use such IT to approach, tackle and solve problems. Employees in countries such as Brazil, China, India and Mexico are more than twice as likely as those in mature markets to use or download consumer applications from the Internet to solve a work problem. They are also more inclined to create their own tech-based solutions or use their personal social contacts (gained through social media technology) to solve a problem. (See Figure 2.)

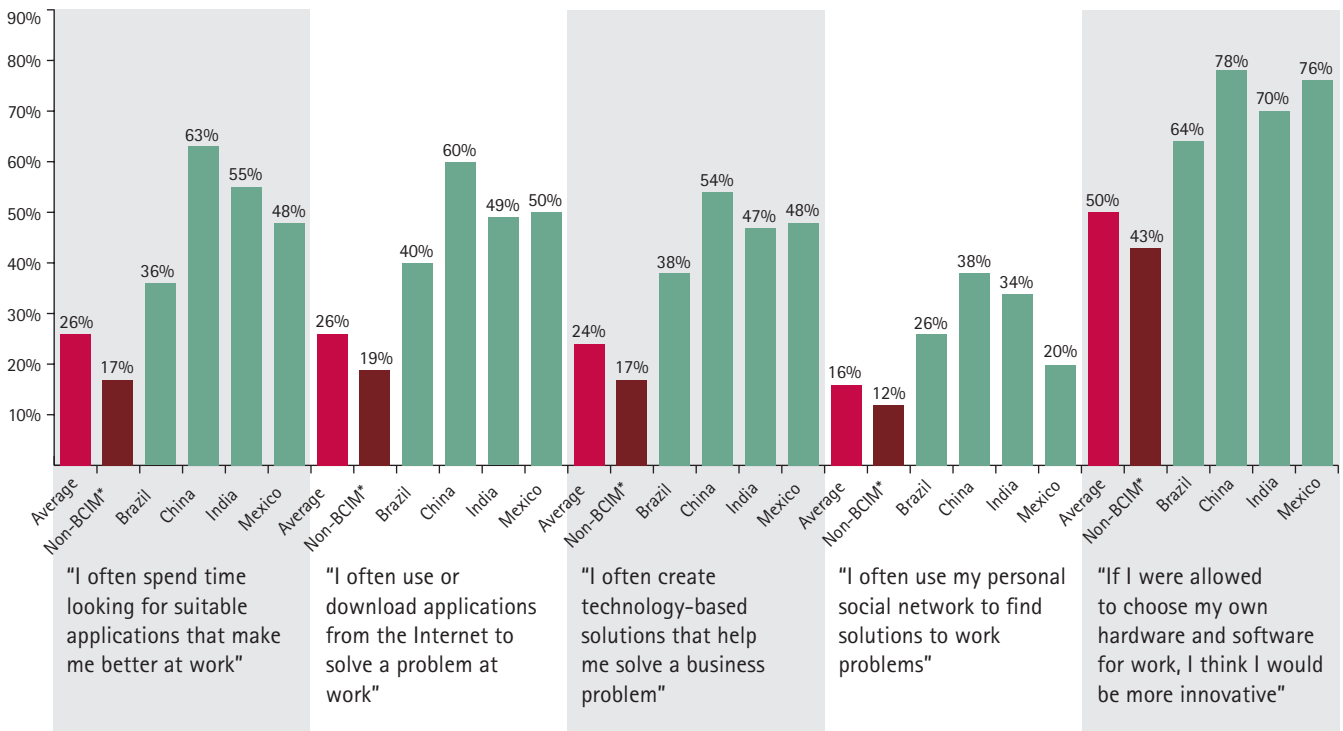
Instead of relying on established processes, employees in emerging markets create their own practices from scratch, with the help of consumer IT. Employees in emerging and developed countries alike see a direct relationship between permitting the use of consumer technologies in

the workplace and innovation. However, those in emerging-market economies believe more strongly that use of such technologies can make a significant difference in their innovativeness. When prompted to indicate whether they expect consumer IT to help them be more innovative in their job, employees in emerging economies rated their perception consistently higher—on average between 21 to 35 percentage points—than their mature market counterparts.

Figure 2: Viewing consumer IT as an innovation booster

Consumer IT is used in a variety of ways. While employees worldwide deem consumer technologies to be a driver of innovation, it is the employees in emerging market countries that perceive them to be particularly useful.

* BCIM stands for Brazil, China, India, and Mexico; Non-BCIM refers to the remaining 12 countries
 ** Graph only includes subjects that agree or strongly agree with this statement; neutral, disagree or strongly disagree answers were excluded from this chart



Enhancing productivity

Our study also showed that employees in Brazil, China, India and Mexico spend considerably more time than those in other countries seeking out applications that they think will make them more productive at work. When asked whether they believe that consumer technology would lead to better use of their resources or higher-quality work, employees in emerging economies consistently “agreed” or “strongly agreed” on such IT’s positive impact. (See Figure 3.) More than 70 percent of our study participants from India and Mexico, and 82 percent of our China respondents, showed strong agreement—compared to much lower percentages of participants from developed nations.

For emerging and mature economies, productivity and technology seem to perpetuate one another. But for emerging markets specifically, this effect seems remarkably pronounced. As those markets ramp up their economies, consumer technologies are becoming increasingly available to a broad spectrum of people. This, in turn, could fuel economic growth even further. The World Bank has found that with the addition of 1 mobile phone per 10 people, the per-capita GDP of a typical emerging nation will increase by roughly 0.8 percent.¹

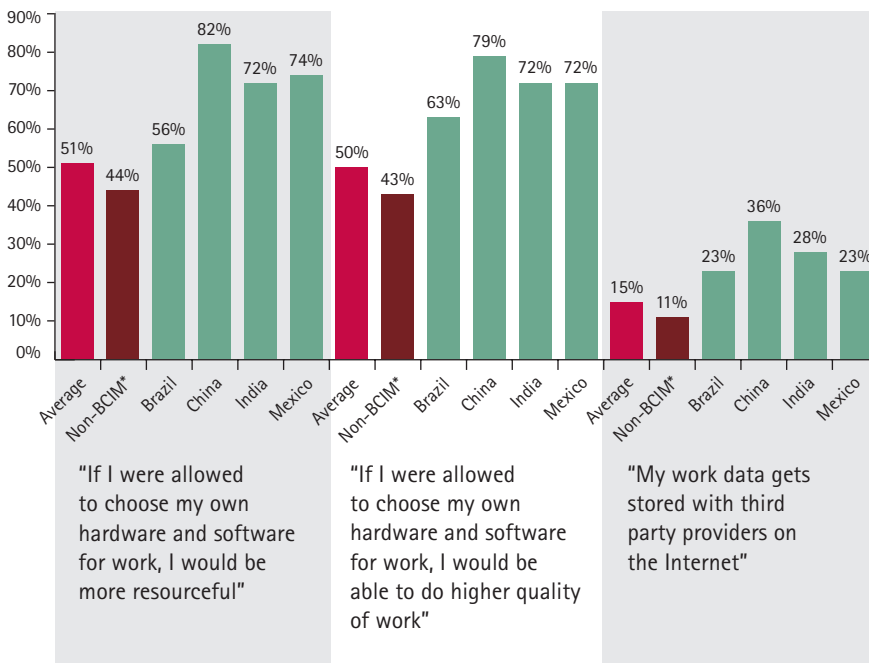
In this context, the availability of cloud-based data and applications accelerates opportunities for value creation, making workers more productive irrespective of time and location. Cloud computing provides

tools in a more accessible, cheaper and easier-to-use manner than technologies traditionally used by corporate IT. Indeed, compared to their Western equivalents, employees in emerging economies use the cloud almost twice as often in the workplace. (See Figure 3). This effect may stem from the lack of existing enterprise systems, the lack of IT policies or both.

Figure 3: Perceiving consumer IT as productivity enhancer

Employees believe consumer IT is important to their ability to work more efficiently and effectively. Its appeal is supplemented by the wealth of cloud services available.

* BCIM stands for Brazil, China, India, and Mexico; Non-BCIM refers to the remaining 12 countries
 ** Graph only includes subjects that agree or strongly agree with this statement; neutral, disagree or strongly disagree answers were excluded from this chart



Capturing and keeping top talent

Last, our study revealed differences in attitudes regarding consumer IT's power to attract and retain talent. As companies strive to compete by recruiting the best employees and keeping them on board, they're finding that offering these workers access to leading-edge technology can help. In particular, encouraging the use of consumer technologies sends a clear message that employees will have the most current tools available as well as maximum flexibility and freedom in carrying out their work. Yet again, this effect is remarkably more pronounced for consumer technologies in emerging-market economies than in mature ones.

For example, our survey respondents from emerging nations showed

consistently higher levels of job satisfaction if allowed to use consumer technologies for work purposes. While the impact is noticeable around the globe (world average is 59 percent), employees in emerging markets feel most influenced by the type of tools available. (See Figure 4.) With rates well above 70 percent, employees in countries such as Brazil, China, India and Mexico assign more importance to the use of the latest consumer IT than their mature-market counterparts. In fact, having the latest technologies at hand is so important to emerging-market employees that a large percentage is willing to pay for their own IT. And as their country's middle class grows, more of them can pay. More than 36 percent of our study participants from emerging economies have no objection to paying for some of their devices and applications for

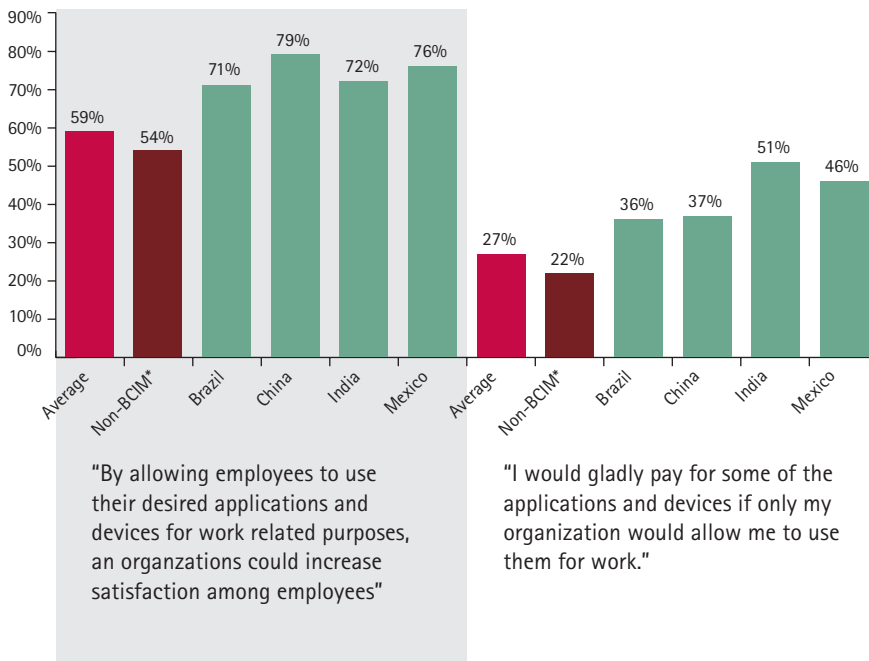
work, contrasted by mature-market countries, where employees are less inclined to shell out for such tools.

This figure is particularly interesting in light of differences in purchasing power, which is 2 to 15 times lower in emerging markets than in mature markets.² Despite these differences, the prospect of using a consumer device or application for work and home seems to hold more appeal for people in emerging economies. The novelty of these tools may be one reason. Another may be that IT policies are still nascent in emerging markets, owing to the lack of a pre-existing infrastructure. Employees who have long been restricted to using certain mandated technologies may perceive consumer technologies as desirable must-haves.

Figure 4: Seeing consumer IT as a workforce-retention weapon

Consumer technologies contribute significantly to employees' job satisfaction across the globe. However, employees in emerging markets are more amenable than their mature market counterparts to paying for their own devices and applications.

* BCIM stands for Brazil, China, India, and Mexico; Non-BCIM refers to the remaining 12 countries
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Consumer technologies and economic growth

Additional trends that are gathering steam around the globe will likely foster even greater use of consumer IT by emerging-economy workers. These trends will present fresh opportunities for organizations in emerging markets to drive growth and pull ahead of rivals. Companies with workforces that are already embracing consumer IT and extracting measurable business value from it will be best positioned to capture those opportunities.

Worldwide, emerging markets will serve as the primary engine of economic growth in the years to come, accounting for 70 percent of it.³ The increasing use of affordable consumer technologies in such economies will help drive that growth by opening untapped markets. As just one example, an agricultural company in India has developed a mobile app that lets farmers use their personal cell phones to sell produce. Viewing information delivered mostly in a pictogram format by the app, farmers can see what current market prices are for specific types of produce, how much of each type is needed and where it is needed.

New supply-chain strategies are presenting additional opportunities to use consumer IT in emerging-market workplaces. Already, Western firms are rethinking their traditional strategy of inventing at home and then exporting to developing markets. Of the Fortune 500, 98 companies now have R&D facilities located in China; 63 have them in India. In addition, vendors and manufacturers are increasingly concentrating on selling to emerging markets before entering mature markets.⁴ Consumer IT used in the workplace could help accelerate this ongoing trend. Many consumer tools are cheaper, easier to use and quicker to implement than traditional enterprise IT, and they appeal more to emerging markets' entrepreneurial appetite.

Furthermore, consumer technology presents a first-of-its-kind opportunity to transform what's historically been a liability—lack of IT infrastructure—into an advantage. Such technologies, particularly when linked through cloud computing (such as software as a service), can inexpensively compensate for the absence of enterprise systems that, in the past, limited the growth of organizations in developing economies. For companies that have long boasted established systems, this development means that they can no longer rely on their IT infrastructure to differentiate themselves from aspiring rivals. On the contrary, what used to function as a barrier of entry against upstart competitors might now become an obstacle for all players. Just as Japanese manufacturers in the 1980s learned from and avoided early adopters'

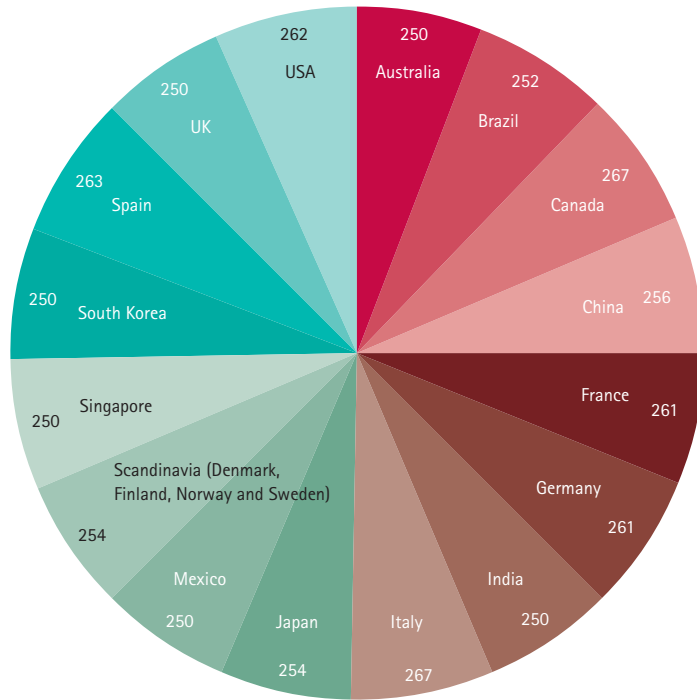
mistakes, emerging-market companies might have the opportunity to leapfrog over an entire era of legacy systems by embracing consumer technologies. And while they may have smaller overall budgets, they can selectively deploy only those technologies—taken straight from the consumer market—that are most relevant to their needs.

Business and IT executives alike will have to understand that the use of consumer technologies in the workplace—the “consumerization” of IT—is a global phenomenon. Throughout the world, they will have to address it, not with piecemeal measures, but with strategies that help them get the most out of these technologies while still maintaining adequate control. In emerging markets, employees see even greater possibilities for the use of consumer IT at work. As the landscape becomes ever more competitive, companies operating in those markets can't ignore these attitudes. To maintain high growth at the business or national level, leaders will have to harness their employees' enthusiasm for consumer IT as a tool for competitive advantage.

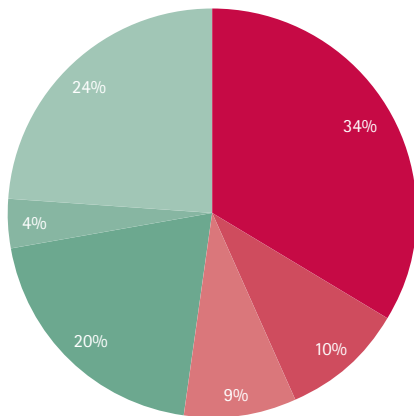
About this study

The Accenture Institute for High Performance conducted a survey on the consumerization of IT, sampling 4,097 full-time employees from 16 different countries representing nine different languages. (See Figure 5). The sample was drawn equally across industry and age groups, with approximately 250 employees from each of the 16 countries. All survey participants worked at companies with more than 100 employees. The survey was conducted in February/March 2011 and contained more than 80 questions; it was augmented by 47 semi-structured interviews with business and IT executives.

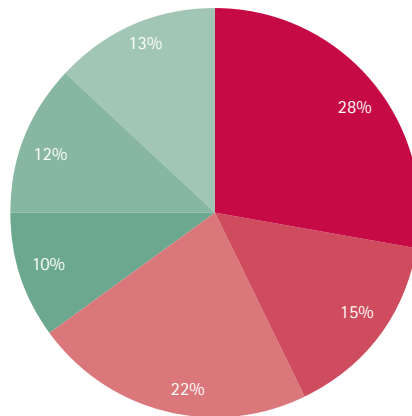
Figure 5: Survey demographics
By country (in numbers of employees)



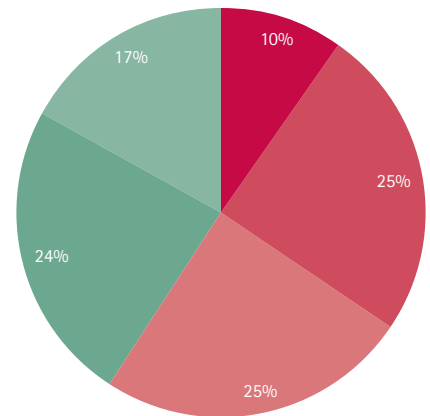
By industry (in percent)



By number of employees (in percent)



By age groups (in percent)



- Products Group
- Communications and Health Services
- Financial Services Group
- Health and Public Services Group
- Resources Group
- Other

- 100-499
- 500-999
- 1,000-4,999
- 5,000-9,999
- 10,000-49,999
- >50,000

- 18-24
- 25-34
- 35-44
- 45-54
- 55-65

About the authors

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Notes

- 1 Christine Zhen-Wei Qiang, *Mobile Telephony: A Transformational Tool for Growth and Development*, World Bank, 2009.
- 2 World Bank, *International Comparison Program*, 2011.
- 3 "The World Turned Upside Down," *Economist*, 2010.
- 4 Ibid.

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 236,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$25.5 billion for the fiscal year ended August 31, 2011. Its home page is www.accenture.com.

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