

## The World, the Economy, and You: New Opportunities for Technology-Driven Business Transformation

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### The Rising Tide

Despite the economic turmoil caused by the “Great Recession,” developing nations and less-developed countries are seeing surges in productivity and gross domestic product (GDP)—bearing out the notion that “a rising tide lifts all ships.”

The block of developing nations collectively known as “BRICs”—Brazil, Russia, India, and China—is growing rapidly. Concomitant with economic growth, we are also seeing the rise of a middle class in these countries—which will significantly impact the quantities and types of products the BRICs will be importing in the future. Imports of high-value goods are likely to increase as low-value-added imports fall.<sup>1,2</sup>

Africa is at last emerging from stagnation, bringing the continent’s collective GDP to roughly the equivalent of Brazil’s or Russia’s. Real GDP rose by 4.9 percent per year from 2000 through 2008, and here, too, a middle class is on the rise. Just 32 percent of this increase has come from Africa’s abundant natural resources; the other two-thirds has come from other sectors such as wholesale, retail, transportation, telecommunications, and manufacturing.<sup>2</sup>

These transformations are taking place rapidly, and they will have significant impacts on the global economy, and on where and how enterprises choose to do business. In our era of increasing globalization, there is a greater need than ever before for communications, collaboration, and innovation to take place across organizations that are culturally diverse, geographically dispersed, and operating 24 hours a day around the globe. We must rethink and reevaluate how we consume and deploy technology to improve business outcomes. In addition, developing countries have the advantage of being able to implement the latest technologies, often being unencumbered by legacy technology and communications systems.

The Cisco® Internet Business Solutions Group (IBSG) has identified four technologies as having the greatest potential to spur transformation for global enterprises within the next two to three years: **mobile Internet, business analytics, social networking, and cloud computing**. While an awareness of these trends has existed for several years, CIOs must pay heed to the pending acceleration in these transformations as the global economic landscape shifts to a new configuration.



Cisco Internet Business Solutions Group (IBSG)

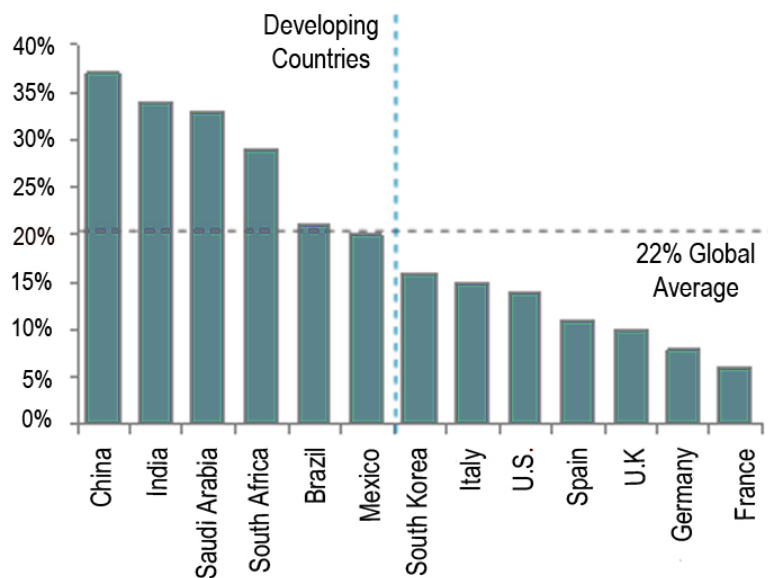
## Mobile Internet

Analysts expect significant growth in the use of mobile Internet technology from 2011 to 2013. IDC forecasts that the number of mobile devices accessing the Internet could exceed 1 billion globally by 2013.<sup>3</sup> This growth will be driven by mobile users seeking to access rich online applications and services. Business users, in particular, will access a growing list of business applications from their mobile devices, and the lines between corporate and personal use of mobile devices will continue to blur.<sup>4</sup> By 2013, Gartner predicts that mobile phones will replace PCs as the most common device for web access, with worldwide mobile penetration rate reaching 90 percent by 2014.<sup>5</sup>

Mobile growth in developing nations is expected to be particularly strong, as mobile users grow increasingly sophisticated. India and China alone are expected to account for more than 295 million units in handset shipments in 2010, setting the stage for these two nations to be drivers of mobile Internet growth in 2011-2013.<sup>6</sup> Mobile users in developing nations are primed to be mobile Internet users. In a recent primary research study of 6,000 mobile users across 13 countries undertaken by Cisco IBSG, mobile users in developing countries were found to be most likely to make their phones an “on-the-go” link to the Internet (see Figure 2).

Figure 1. Mobile Users in Developing Nations Are Receptive to the Mobile Internet

### Percentage That Consider Their Phones To Be On-the-Go Link to Internet



Source: IBSG Connected Life Market Watch, 2009

## Business Analytics

During the next several years, business analytics will assume a more important role in decision making for global enterprises. The global financial crisis has exposed gaps in businesses’<sup>7</sup> operations, and has driven executives to question whether they have the systems to capture, retrieve, analyze, and transform data into actionable intelligence.<sup>8</sup> Gartner predicts that businesses will increasingly employ advanced analytical tools and

models to enable simulation, prediction, optimization, and other business analytics to empower better decision making.<sup>9</sup>

Enterprise technology vendors have launched service offerings to support the analytics needs of global enterprises. In 2009, IBM launched its Business Analytics and Optimization services unit, its first new services business unit since 2002. The group employs more than 4,000 consultants and more than 450 researchers and mathematicians to deliver analytic services designed to “improve the speed and quality of business decisions.”<sup>10, 11</sup> IBM also has made strategic acquisitions, most notably those of Cognos and SPSS, to boost its portfolio of business intelligence and predictive analytics solutions. In a recent interview, IBM CFO Mark Loughridge stated, “When we look at business analytics, we think that opportunity is going to be as big as TRM (trading and risk management) or ERP.”<sup>12</sup>

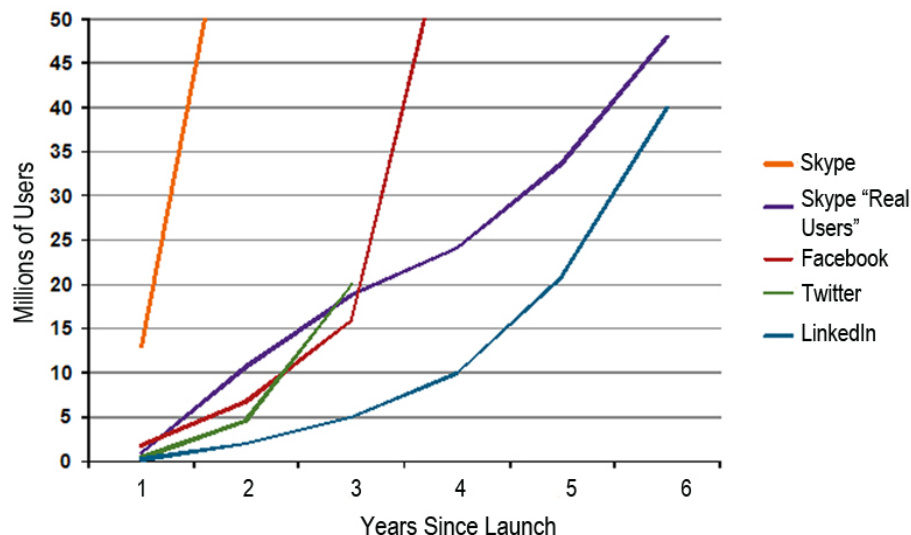
Due to the rise of improved connectivity and network bandwidth, the cost of compelling an analytically driven customer purchase has fallen dramatically. Years ago, business analytics was used to support product-level marketing or logistics. Now, analytics can be inserted at the transaction level and be used to customize a specific customer experience.

## Social Networking

Industry watchers believe that 2010 is the year that social networking achieves critical mass in terms of acceptance and adoption in the enterprise. Economic factors, maturing technology, and the desire by workers to integrate their personal and work lives will accelerate this trend.<sup>11</sup> Enterprises will exploit the power of social computing on two fronts:

- They will use social software and social media within their organizations to improve employee collaboration and knowledge sharing.
- At the same time, they will use social networking to drive awareness, participation, and integration with their external constituents—customers, partners, suppliers, and the public—around the globe.<sup>13</sup>

Figure 2. Explosive Growth in Social Networking Users

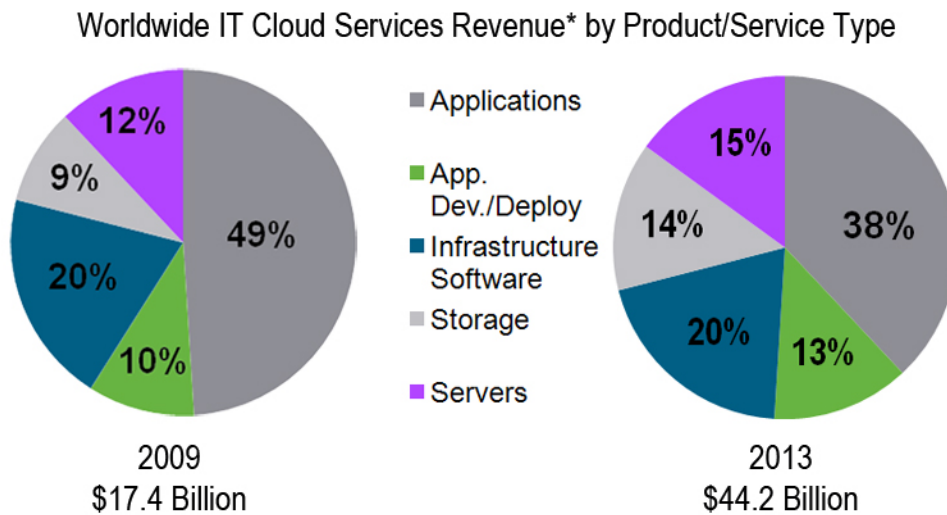


Source: Cisco IBSG, 2009

## Cloud Computing

According to IDC, cloud services will grow at six times the rate of traditional IT offerings, representing an annual growth rate of 26 percent. Still, by 2013, cloud services are projected to account for just 10 percent (\$44 billion) of IT spending, up from 5 percent (\$17 billion) in 2009. Thus, most of the expenditures related to cloud computing will be on the transformations that cloud computing enables rather than on the cloud itself. Inevitably, however, the compelling economics of cloud computing will result in a significant percentage of enterprise IT migrating to the cloud. (For more on this subject, see “Getting to the Silver Lining: Taking the Cloud Challenge,” by Jim Cooke, included in this compilation.)

Figure 3. Cloud Services Forecast: 2009 and 2013



\* Includes revenue from delivery of applications, application development/deployment SW, systems infrastructure SW, and server and disk storage capacity via cloud services model; AD&D excludes online B2B messaging

Source: IDC, September 2009

## Conclusion

The core disruptive technologies of mobile Internet, business analytics, social networking, and cloud computing will transform the preferred IT delivery and deployment models for global enterprises. As new markets open in regions of the world formerly considered unproductive, the need for effective communications and collaboration among widely distributed people and operations will grow exponentially. Enterprises will do well to evaluate how investment in these disruptive technologies may be instrumental in creating a position of strength once the economy fully recovers; those poised to move fast will likely win the race.

## Endnotes

1. "Is This the 'BRICs Decade'?" Dominic Wilson, Alex L. Kelston, and Swarnali Ahmed, *BRICs Monthly*, Goldman Sachs, May 2010.
2. "What's Driving Africa's Growth," Acha Leke, Susan Lund, Charles Roxburgh, and Arend van Warmelen, McKinsey Global Institute, June 2010.
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4. *Ibid.*
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13. <http://www.cmswire.com/cms/enterprise-20/gartner-top-technology-predictions-for-2010-and-beyond-006390.php>

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### More Information

Cisco Internet Business Solutions 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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