

THE ENTERPRISE OF THE FUTURE

TELECOM INDUSTRY EDITION



GLOBAL CEO STUDY

SURVEY SAMPLE

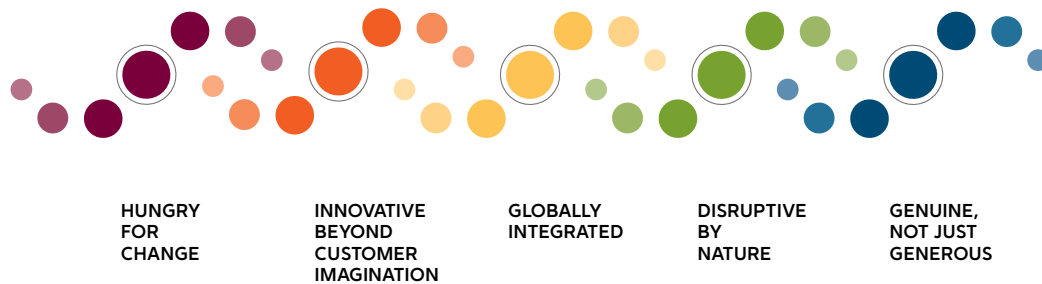
Our telecom sample includes CEOs from fixed-line telecom providers, mobile telecom providers and integrated operators. Thirty-seven percent are based in the Americas; 43 percent in Europe, the Middle East and Africa; and 20 percent in Asia. Almost all of these leaders were interviewed face-to-face by IBM executives.

INTRODUCTION

We conducted 1,130 interviews with chief executives, general managers, business leaders and public-sector heads in the course of completing the research for our third biennial Global CEO Study, which aims to identify the key characteristics of the Enterprise of the Future.¹ Here we focus on the responses of the 47 CEOs who run telecom companies (see Survey sample sidebar).

Our findings show that the Enterprise of the Future has five key traits. It is:

- **Hungry for change**
- **Innovative beyond customer imagination**
- **Globally integrated**
- **Disruptive by nature**
- **Genuine, not just generous.**





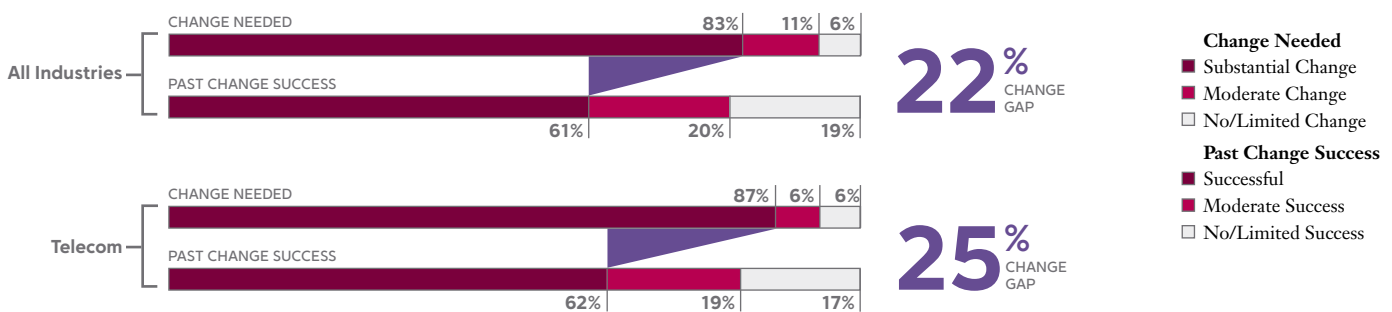
HUNGRY FOR CHANGE

Telecom CEOs are acutely aware of the need for change, but unsure how to make change work. How can they replace falling voice telephony revenues and fend off new rivals?

Telecom CEOs anticipate a period of even greater change than their peers in most other industries. Eighty-seven percent expect significant changes in the next three years, compared with 83 percent of the total survey population. However, they are no better at managing change than CEOs in other sectors. So the gap between those who foresee substantial changes and those who have managed change successfully in previous years is also larger than it is in the overall sample (see Figure 1).

FIGURE 1 THE CHANGE GAP

Telecom CEOs are struggling to keep up with the increasingly frenetic pace of change.



.....
“We have seen more change
in the last 10 years than in
the previous 90.”

CEO, Dutch telecom provider
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Moreover, that gap is growing; indeed, it has more than doubled since 2006, when we conducted our last Global CEO Study. Two-thirds of telecom respondents still worry about market factors, technological challenges and regulatory issues. But a considerable number are also increasingly concerned about the shortage of talent (36 percent), the macro-economic climate (21 percent) and globalization (19 percent).

Such apprehensions are hardly surprising, given the magnitude of the forces reshaping the industry. Voice telephony was the primary source of revenues for a century, but the Internet and deregulation have paved the way for alternative providers and numerous new entrants offering richer and cheaper communication services in a highly competitive marketplace. Moreover, although revenues from broadband and Internet-Protocol (IP) services are growing steadily, they will not be sufficient to compensate for the decline in revenues from traditional fixed-line services. Even the mobile communications market – which has led much of the expansion in overall telecom revenues over the past decade – has begun to slow down, as average revenue per user (ARPU) drops and subscriber penetration peaks in the industrialized economies. Many telecom companies are therefore trying to broaden their offerings, both to fend off competition from new players and to access new revenue streams.

A global survey of telecom carriers conducted by the IBM Institute for Business Value and the Economist Intelligence Unit shows, for example, that more than half of all telecom executives plan to open up their networks to external application providers to enable the development of new services that incorporate telecom capabilities, such as location tracking, voice mail access, contacts management and presence. At least two-fifths of respondents also plan to move into media and entertainment or IT infrastructure services and management, while one-third are considering how best to capitalize on their existing customer relationships and mobile networks to deliver targeted commercial advertising.²

However, some companies may be forced to delay such initiatives, as the cost of capital rises, and access to credit and short-term capital becomes increasingly limited, following the global financial crisis that started in late 2008. In the short term, many of the structural changes that are required might be stalled, as cash preservation and investments with relatively short payback periods take priority. If this happens, cash-rich competitors with lower cost bases might benefit in the long term.

.....
“We are dealing with
the baggage of bringing
a monopoly into a
competitive environment.”

CEO, U.S. telecom provider
.....

Implications

Most carriers will need to become much more innovative. They will have to keep a close eye on what is happening in related industries, like media and entertainment; identify the potential impact on their own markets; and explore new opportunities for generating revenues. That, in turn, means they will have to become more agile and more flexible.

They will also have to manage risks more effectively. One way of doing this might be to create a modular organizational structure and isolate new ventures from the rest of their operations to minimize the effect of any failures. Collaborating with other companies would likewise help to mitigate the financial and technological risks associated with moving into new areas of business, as well as stimulating innovation.

Lastly, telecom providers will have to enhance their change management skills so that they can more effectively anticipate and manage continuous change. That, in turn, means they will have to enable employees to participate in the innovation agenda and build a dynamic business architecture, including a flexible and adaptive IT infrastructure, to support new business models and new ways of working.

Case study

BT: BREAKING THE MOLD

Britain's incumbent telecom provider has undergone enormous changes since it was privatized in 1984. It is now a global communications company serving customers in over 170 countries, including major multinational organizations like American Express, Volvo and Unilever.³

BT has also diversified into numerous other areas of business. Ten years ago, 80 percent of its revenues came from voice telephony.⁴ Today, it derives 38 percent of its revenues from its Global Services Division, is Britain's main broadband provider and has expanded its product range to include TV, home security and CCTV services, among other things.⁵

Some of the changes BT has made – like separating control over the access network from the main business to ensure that rival operators have equal access – have been undertaken for regulatory reasons. But many initiatives have originated from within. One such example is BT's ambitious 21st Century Network (21CN) program to replace multiple legacy networks with a single, all-Internet Protocol (IP) network. The transformation is expected to deliver substantial savings, as well as equip BT to offer next-generation services like integrated voice and broadband, and hi-definition video on demand.⁶



INNOVATIVE BEYOND CUSTOMER IMAGINATION

Telecom CEOs are eager to serve increasingly well-informed consumers. But what should they do to create new value and enhance the customer experience?

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“Consumers are becoming more sophisticated buyers; they are spending more money on entertainment, but they are also more demanding.”

CEO, Canadian telecom provider
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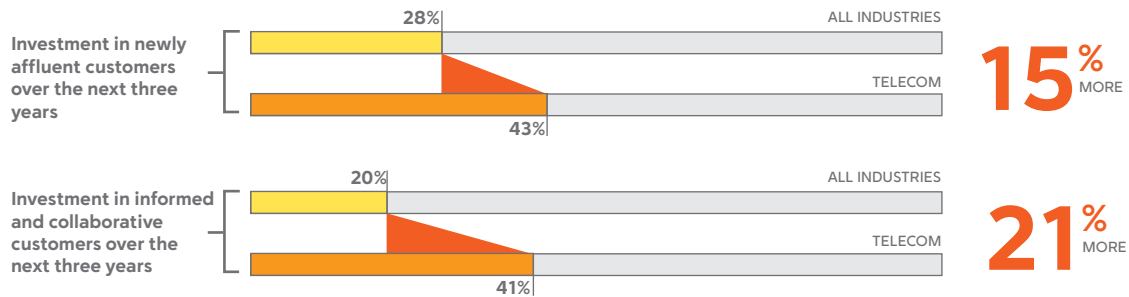
Two-thirds of the telecom CEOs in our sample believe that greater global prosperity will be good for business (as do their peers in other industries). However, they are even more enthusiastic about the rise of increasingly informed and collaborative customers; 89 percent believe that savvy consumers represent a significant commercial opportunity, compared with 76 percent of the total survey population.

Their investment plans reflect these priorities. Telecom CEOs plan to allocate a substantially bigger share of their total investments to serving newly affluent and knowledgeable consumers than CEOs in other industries over the next three years (see Figure 2).⁷

But they are primarily focusing on traditional areas of business. Ninety-six percent intend to invest in developing new products and services, for example, while 60 percent intend to invest in forming new business relationships and 62 percent in targeting new customer segments. The number of respondents who plan to invest in creating new channels or entering new markets is considerably smaller (only 49 percent and 32 percent, respectively). These findings are consistent with the results of an earlier survey conducted by IBM, in which telecom executives placed much more emphasis on the development of new products and services than on empowering consumers.⁸

FIGURE 2 THE INVESTMENT PRIORITIES OF TELECOM CEOS

Telecom CEOs plan to spend substantially more than CEOs in other industries capturing the opportunities presented by increasingly affluent and informed customers.



Implications

At one time, the core component of any telecom provider's business was its network. Now, however, the focus is shifting from connectivity to the consumer experience. So telecom CEOs will have to look beyond the development of new products and services, and invest in enabling consumers to do more, more easily and enjoyably.

There are three ways in which telecom carriers can do this. They can extend the scope of the services they offer (e.g., by offering integrated services such as interactive multiplayer gaming and bringing the "long tail" of otherwise unviable commercial content within popular reach); they can create a more convenient experience (e.g., by making services accessible anywhere at any time via any device and providing more flexible payment processes or other capabilities); and they can empower users (e.g., by enabling them to control what they access and delivering services that are highly personalized).⁹

Such enhancements may not generate substantial returns immediately, given the slowdown in both the industrialized and emerging economies. As the global economic crisis deepens, consumers are likely to reduce discretionary expenditure on telecom services, switch to flat tariff payment plans and move to cheaper providers. Nevertheless, it is clear that this is the way in which the market is evolving, and early movers will be in a much better position to capitalize on demand for new consumer experiences, when the economic recovery takes place.

Case study

NINTENDO: BUILDING MARKET SHARE THROUGH CUSTOMER COLLABORATION

Any telecom company that is interested in offering new services like gaming would do well to look at how Nintendo collaborated with its customers to recapture the high ground. In the early 1990s, the company's share of the game console market was 61 percent, but by the mid-2000s, it had fallen to 22 percent.¹⁰ To regain its leadership position, Nintendo needed to find new ways to delight gamers – and to bring gaming to new audiences.

To do that, Nintendo went straight to the source – gamers themselves. The company established an online community by offering incentives in return for customer information. The company also selected a group of experienced gamers based on the value and frequency of their community contributions. These "Sages" were given exclusive rewards, like previews of new games, in exchange for helping new users and providing community support.¹¹

Through this community, Nintendo has gained valuable insights into market needs and preferences. This has influenced everything from game offerings – like an online library of "nostalgic" games that appeal to older gamers – to new product design – for example, the intuitive controls of the popular Nintendo Wii system, which have helped attract new, casual gamers.¹²

By leveraging the loyalty and expertise of its core customer segment, Nintendo has successfully connected with two new ones – women and older men. This collaboration seems to have paid off: Nintendo is once again ahead of its competitors, with 44 percent market share.¹³



GLOBALLY INTEGRATED

Many telecom carriers are more interested in leveraging global capabilities to defend their core business than expanding abroad. But how can they acquire the right partners and skills?

Most CEOs, irrespective of the sector in which they operate, plan to make sweeping changes in their companies over the next three years, recognizing that globalization will require new business designs. However, the nature of their activities means that many telecom CEOs are more local in their outlook than their peers in other industries.

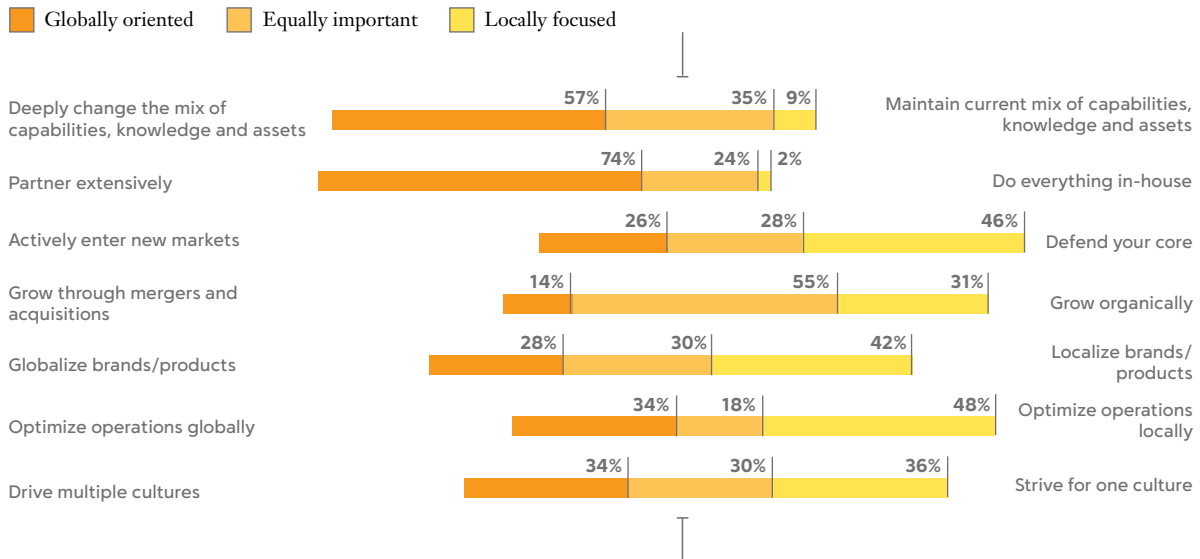
We used data clustering techniques to analyze the responses of all the CEOs who participated in our survey. Sixty-four percent are “globalizers” or “extensive globalizers”; the remaining 36 percent are either “blended thinkers” or “localizers.”¹⁴ In the telecom industry, by contrast, only 47 percent of CEOs are “globalizers” or “extensive globalizers,” while 53 percent are “blended thinkers” or “localizers.”

This perspective is reflected in their strategic priorities. Seventy percent of telecom CEOs are concentrating on defending their core business, compared with just 25 percent of the total survey population. Similarly, 64 percent are focusing on optimizing their operations locally and 47 percent on localizing their brands and products, versus 33 percent and 32 percent, respectively, of the overall sample. However, telecom CEOs are equally keen to change the mix of skills, knowledge and assets their companies possess, and they are much more likely to form partnerships than their peers in other industries (see Figure 3). In effect, they are using some of the same strategies to defend their core markets that other companies are using to become more globally integrated.

“We will actively enter new markets but, in fact, we are doing this to defend our core: our enterprise customers expect global capabilities from us.”

CEO, U.S. communication services provider

FIGURE 3 THE TELECOM INDUSTRY IS MORE LOCAL THAN OTHER INDUSTRIES IN ITS OUTLOOK
Telecom CEOs are focusing on forming partnerships and acquiring new skills to defend their core markets.



Implications

Telecom “globalizers” should consider building global centers of excellence to optimize their companies’ capabilities and developing integrated platforms to facilitate rapid innovation. But even those who are focusing on their home markets can leverage global resources to improve their companies’ competitive positioning. They can, for example, enter into global partnerships to access specialized skills, reduce their costs, manage their risks and modernize critical business processes and technologies.



DISRUPTIVE BY NATURE

Telecom CEOs plan to make major business model innovations over the next few years. But will they be enough to fight off increasing competition from new market entrants?

Telecom CEOs place more emphasis on business model innovation than CEOs in all but three other industries: media and entertainment, healthcare and financial services. Seventy-seven percent plan to change their business models extensively over the next three years, while the remaining 23 percent plan to make more modest alterations. However, unlike their peers in other industries, they are focusing mainly on revenue model innovation (see Figure 4). Forty percent intend to reconfigure their products, services or pricing strategies, while 30 percent intend to differentiate themselves more effectively, collaborate with external partners or make internal improvements (versus 23 percent and 39 percent, respectively, of the total sample).

Only 15 percent of telecom CEOs intend to change their industry models, a fact that is somewhat surprising, given the extent to which deregulation and technology have disrupted the market by lowering the barriers to entry and increasing the competition on prices.

.....
“Our annual operating plan has zero investment in new products. Our focus is on identifying new combinations and tariff options.”

CEO, U.K. mobile telecom provider
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FIGURE 4 REVENUE MODEL INNOVATION IS MOST COMMON CHOICE

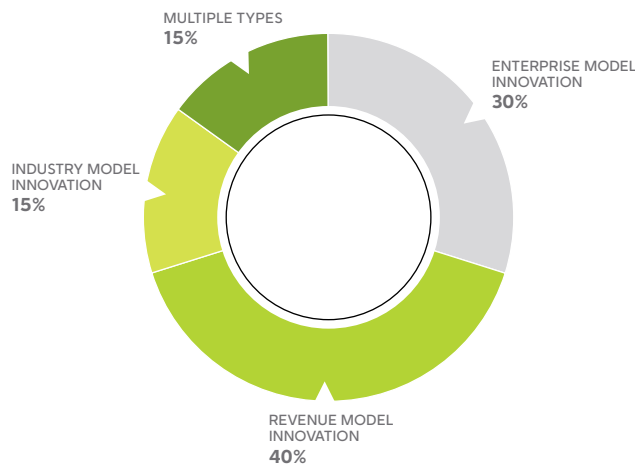
Two-fifths of telecom CEOs plan to change their business models by developing new value propositions and pricing models. .

TYPES OF BUSINESS MODEL INNOVATION CONSIDERED

Enterprise model
Specializing and reconfiguring the business to deliver greater value by rethinking what is done in-house and through collaboration

Revenue model
Changing how revenue is generated through new value propositions and new pricing models

Industry model
Redefining an existing industry, moving into a new industry, or creating an entirely new one



It is typically more difficult to redefine an existing industry, enter a new industry or create an entirely new industry than it is to engage in other forms of business model innovation. But 57 percent of the telecom CEOs we surveyed in 2006 thought it very likely that competitors would transform the commercial landscape in which they operate, whereas only 38 percent of the total sample expressed such concerns.

In the past two years, technological advances have blurred the boundaries between telecommunications, media and entertainment still further, and rival providers have made even greater inroads into the telecom industry’s core domain. Yet the percentage of telecom CEOs who aim to pioneer new industry models is three percent less than the overall average.

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 “We are very concerned about new business models and threats from companies like Google.”

CEO, U.S. Voice-over-Internet-Protocol service provider

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Implications

Focusing on new value propositions and pricing structures is not a sustainable long-term strategy for those telecom operators that are under threat from cable companies offering triple-play packages or unregulated new entrants, including some that have very low operating costs, like Google, Facebook, Microsoft Corporation and Skype. Such carriers will need to put much more emphasis on changing their enterprise models and collaborating with other firms to enable them to develop new skills, enter new markets and improve their agility.

They might want, for example, to consider forming partnerships with content providers and advertising agencies both to move into adjacent markets and to compete more effectively with traditional media distributors for advertising dollars. Some telecom companies might also want to join forces with independent software vendors and system integrators to move up the value chain. Indeed, the current environment may provide many new opportunities for the strongest carriers to collaborate with companies in other areas of business and position themselves for greater success when the economic climate improves.



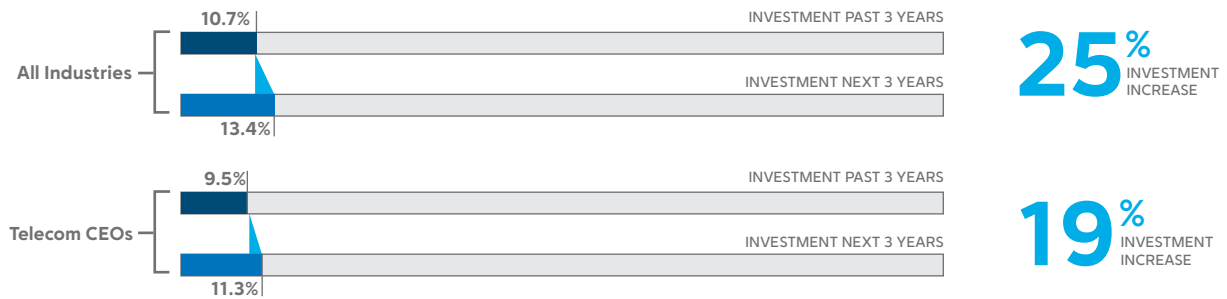
GENUINE, NOT JUST GENEROUS

Telecom carriers could do far more to benefit from the corporate social responsibility agenda. How can they create a sustainable relationship with the communities they serve?

Most CEOs, whichever industry they represent, believe that their customers are increasingly concerned about corporate social responsibility (CSR) – i.e., acting in an ethical fashion that considers the needs of the workforce, society and the environment, as well as those of investors. However, telecom CEOs are less inclined to view this trend positively; only 53 percent believe it will be good for business, compared with the overall average of 69 percent. This probably explains why telecom CEOs are allocating a smaller proportion of their total investments to CSR initiatives than their peers in other industries (see Figure 5).

FIGURE 5 TELECOM CEOS ARE CAUTIOUS ABOUT THE BUSINESS BENEFITS OF CSR

They plan to increase the amount they invest in CSR by significantly less than the overall average over the next three years.



In fact, there are good reasons why telecom CEOs should embrace the CSR agenda, because it offers many opportunities to profit, both socially and commercially. One such instance is the contribution they can make to the protection of the environment. Although telecom networks and handsets currently account for less than one percent of global greenhouse gas (GHG) emissions, industry commentators predict that the level will more than double by 2020, as the number of subscribers in emerging economies increases and telecom carriers expand their networks to handle larger volumes of data.¹⁵

This is by no means the only way in which the industry could contribute to society's well-being. It could, for example, play a key role in addressing concerns about the safety of the Internet, particularly with regard to the protection of children from bullying and other

.....
“We need to take a lead role with regard to the environment...The youth market is increasingly important, and the young are very interested in CSR.”

CEO, Canadian telecom provider
.....

forms of abuse. It could also develop new products for disabled minorities, and help bridge the digital divide between the industrialized and emerging economies, with products and services tailored to the needs of those at the “base of the pyramid.”

Similarly, it could help companies in other industries reduce their carbon footprint and travel costs by providing new services such as mobile virtual private networks, video- and tele-conferencing and automated vehicle-tracking. It could also encourage the recycling of old devices and equipment in order to reduce the impact on the environment and cut waste management costs.

Implications

Telecom companies should focus on creating CSR programs that are aligned with their broader corporate objectives, developing new products and services for consumers who are currently underserved, devising innovative solutions that will help other businesses meet their climate-change targets and providing better recycling facilities. They should also develop more robust content-filtering and security tools, and publicize the steps they are taking more effectively.

In addition to such measures, telecom operators should ensure that sustainability is an intrinsic part of their day-to-day activities – and, here, they enjoy two significant advantages over companies in many other industries. Firstly, they can measure their carbon footprints relatively easily. Their networks typically account for about 80 percent of the carbon emissions they produce, and 75 percent of these emissions come from powering the base-stations that enable mobile phones to work. Secondly, there are several straightforward ways in which to reduce the energy a base-station consumes, such as turning down the air-conditioning, turning off some base-stations during off-peak periods when there are fewer calls to handle and, in the longer term, switching to new generation equipment powered by renewable sources of energy (like solar power or wind power).¹⁶

Case study

TELUS: DELIVERING ON EVERY COUNT

Canadian telecom provider TELUS excels when it comes to CSR. The company is committed to reducing its own carbon footprint by cutting its fuel and electricity consumption, encouraging employees to telework or use environmentally friendly forms of transport (such as walking, cycling or public transport), and minimizing emissions from air travel. It has also developed a number of “green” business solutions to help other companies reduce their impact on the environment.¹⁷

TELUS is simultaneously making an active effort to reduce waste, with a free program for disposing of unwanted handsets and accessories, irrespective of the carrier. In 2007, it recycled more than 40,000 phones, and partnered with Tree Canada to plant a tree for each handset collected through its “Return and Recycle” program.¹⁸

The company also works closely with other telecom providers, law enforcement agencies and government departments to tackle the problem of online sexual exploitation and make the Internet a safer place for children; participates in a number of corporate philanthropy programs; and supports various artistic and cultural initiatives across Canada.¹⁹ These efforts have deservedly earned TELUS a place on the Dow Jones Sustainability Index; indeed, it is the only North American telecom company to enjoy such an accolade.²⁰

BUILDING YOUR ENTERPRISE OF THE FUTURE

Telecom CEOs generally agree with the CEOs in our overall survey sample about the features that will characterize business in the future. Their responses suggest that the successful Enterprise of the Future – as we have called it – will be hungry for change; innovative beyond customer imagination; globally integrated; disruptive by nature; and genuine, not just generous.

But the challenges they face differ from those of other CEOs in several respects. They are more worried about managing change, keeping pace with new technologies and dealing with new regulations. They are also much more concerned about defending their core business from competitors in other industries.

So how can they prepare their companies for these challenges? How can they hire employees with the skills to develop innovative products, services and capabilities – or train existing staff to acquire the necessary expertise? Can they create an adaptable workforce and infrastructure to ensure that viable new ideas can be quickly exploited? Will they find the partners they need to help them capitalize on digital convergence and the potential of the mobile Internet? Are they committed to making their operations as efficient as possible?

We look forward to learning more about where you think your business and the telecom industry as a whole are heading – and working with you, as you build your Enterprise of the Future.

ACKNOWLEDGMENTS

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ABOUT IBM GLOBAL BUSINESS SERVICES

With business experts in more than 170 countries, IBM Global Business Services provides clients with deep business process and industry expertise across 17 industries, using innovation to identify, create and deliver value faster. It offers one of the largest Strategy & Change practices in the world, with over 3,250 strategy professionals. The IBM Institute for Business Value, part of IBM Global Business Services, develops fact-based strategic insights for senior business executives around critical industry-specific and cross-industry issues.

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- ¹³ "Worldwide Hardware Shipments." VGChartz.com, accessed March 27, 2008.
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For further information

To find out more about the Global CEO Study or to discuss these industry implications further, we invite you to e-mail one of the following contacts:

Global	Chris Pearson	chris.pearson@uk.ibm.com
	Eric Riddleberger	eriddle@us.ibm.com
North America	Judith A. List	jalist@us.ibm.com
Latin America	Pablo Esses	pablo.esses@ar.ibm.com
Northern Europe	Ingo Zimmermann	ingo.zimmermann@de.ibm.com
Southern Europe	Mario Cavestany Velasco	m_cavestany@es.ibm.com
Japan	Nozomu Nishikawa	NOZOMUN@jp.ibm.com
Asia Pacific (excluding Japan)	Nick Gurney	nick@au1.ibm.com
IBM Institute for Business Value	Ekow Nelson	ekow.nelson@uk.ibm.com



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Somers, NY 10589
U.S.A.

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