

This report draws on input from the 5,247 C-suite executives (CxOs) who participated in our latest C-suite Study – the eighteenth in the ongoing series of CxO studies conducted by the IBM Institute for Business Value. We now have data from more than 28,000 interviews stretching back to 2003.

Here, we focus on the perspectives of Chief Human Resources Officers (CHROs).

Total number of CHROs interviewed	601
North America	266
Central and South America	32
Western Europe	95
Central and Eastern Europe	23
Middle East and Africa	25
Asia Pacific	88
Japan	72

## **Uncharted territory**

Technological advances are disrupting the status quo and bringing huge turmoil in their wake. Industries are converging, and new competitors emerging, as never before. The nature of work is changing and demand for digital expertise is soaring, while other skills are becoming defunct. So how can CHROs chart a path through the turbulence and help their fellow executives understand the impact on the workforce?

In the first part of our latest C-suite Study, we interviewed 5,247 business leaders to find out what they believe the future holds and how they're positioning their organizations to prosper in the "age of disruption." This report probes more deeply into the views of the 601 CHROs who contributed to our research.

We discovered that the most perceptive CHROs are treating present and potential employees like customers. They're also capitalizing on emerging technologies to improve the employee experience, building a flexible skills base, drawing on analytics to predict future workforce trends and creating a social dialogue with employees to manage change more effectively.

### Convergence, competition, commotion

CHROs, like other CxOs, recognize that the barriers between previously separate industries are collapsing, as companies in one sector apply their expertise to others. For example, electric carmaker Tesla is entering the power sector with a new line of zero-carbon batteries for homes, businesses and utilities.<sup>2</sup> Similarly, online retailer Alibaba is moving into video streaming.<sup>3</sup>

"There's so much discontinuity and it's very difficult to see who the disrupters will be."

CHRO, Professional and Computer Services, United States

"New competitors from different industries are entering our market. We need to look at what these companies are doing, rather than watching how other enterprises in our industry behave."

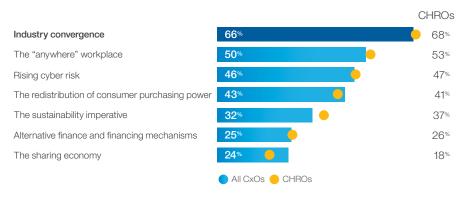
Gustavo Hernan Garcia, HR Director, ICBC, Argentina

CHROs told us that industry convergence is the single biggest trend transforming the business arena (see Figure 1). And they see it as a very mixed blessing. On the upside, it's providing new opportunities for growth by shifting the focus from standalone goods and services to cross-sector customer experiences. On the downside, it's producing more competition, because other enterprises can seize an organization's core business as they expand into adjacent spaces. Hence, 51 percent of CHROs expect more competition from new rivals in contiguous industries over the next three to five years.

What underpins the change in the competitive environment? CHROs point to a potent mix of new technologies and market pressures. Like their C-suite colleagues, they expect both to have a huge influence on their enterprises over the next three to five years. Predictably, however, a larger percentage of CHROs said that people skills would also have a major impact.

Figure 1

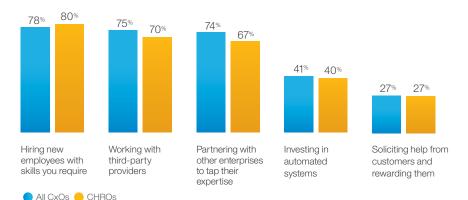
Border disorder: CHROs, like other CxOs, say the barriers between industries are dissolving



CHROs are arguably ahead of the game in this respect. They realize that capitalizing on new technologies and withstanding the dramatic market upheavals now taking place will entail developing a workforce with different capabilities. And they're already planning how to tackle the challenge. Most respondents intend to recruit staff with the skills their enterprises lack. More than two-thirds also anticipate working with third-party providers and partnering with other organizations to gain additional expertise (see Figure 2).

So CHROs are just as attuned as other members of the C-suite to the way the business arena is shifting. And they're actively preparing for a more tumultuous future – a future in which the talent landscape is completely redefined.

Figure 2
Skill fill: CHROs plan to secure new talent primarily by hiring new employees and partnering



"We need a diverse workforce that reflects the customers we serve—a workforce that's also innovative and collaborative, and embraces change."

CHRO, Energy and Utilities, Canada

"We need to create an environment that attracts committed employees and encourages them to stay."

**Barbara Schaerer,** CHRO, Swiss Federal Government, Switzerland

## What to do: Look at talent through a marketing lens

Industry convergence and technological advances will directly affect how CHROs seek and manage talent in three ways. First, they will need to "fish in new ponds." This will force many organizations to review their recruitment practices. Most job advertisements are better at explaining what's required than at selling the job to potential candidates. Cumbersome online application forms and selection processes are another turn-off. And companies that are newcomers to certain labor pools or markets will need to broaden their appeal.

GE is one enterprise that's trying to expand its reach. It recently launched a witty advertising campaign to recruit young software developers. When college graduate Owen tells his family and friends that GE has hired him, they are bewildered. Owen's attempts to explain that he will be writing code that lets machines talk to each other elicit confused stares because everybody assumes GE is still a traditional manufacturer rather than a leading player in the digital world.<sup>4</sup>

Second, CHROs will have to design employee experiences that attract individuals from diverse backgrounds and encourage them to stay. Providing the right connections can enable employees to form communities, foster camaraderie and promote loyalty, for example. Similarly, creating comfortable workplaces with personal space and open areas for free-flowing discussion can improve productivity. And giving staff access to technologies that are as simple and convenient as those they use in their personal lives can make their work easier.

Third, CHROs must watch out for competitors encroaching on their territory. New players won't restrict their attention to customers; they will be equally eager to poach highly skilled employees – as Carnegie Mellon University discovered. In February 2015, the university formed a strategic partnership with Uber to develop driverless-car technology, only to have Uber hire away a number of their top robotics researchers.<sup>5</sup>

As competition for the best talent intensifies, CHROs will need to borrow from the techniques used by Chief Marketing Officers (CMOs). They will have to reposition their organizations to appeal to new employee segments, rethink their social recruitment strategies and build relationships with a wide group of potential candidates. They will also have to provide employee experiences that emulate the personalized customer experiences good marketers deliver.

These changes will act as a catalyst for the transformation of the HR function. Continual workforce planning and skills development will be crucial, for example, to cope with rapidly evolving technologies and expansion into new business lines. CHROs must be able to identify vital skills and instill them in the workforce faster and on a far larger scale than before.

There are ramifications for other executives as well. The upheavals in the business landscape will require leaders who can help employees adapt. Here, the evidence suggests that CxOs fall short (see Figure 3). CHROs are especially unsure about whether their colleagues are ready to manage a more complex workforce – with reason, perhaps. It's far harder to lead a coalition of employees, contractors and individuals from partnering organizations than it is to lead a team of people who work for the same business and have largely similar perspectives.

Figure 3

Chief challenge: CHROs say CxOs are still figuring out how to manage disruptive change

Leadership understands the impact of changing technologies on the workforce

Leadership balances the need to deliver business results with the ability to lead through change

The enterprise is prepared to manage a more complex workforce

63%

"We're now better placed to attract 'rock stars.' But it's harder to keep such people because other companies want them, too."

**Hy Pomerance,** CHRO, QBE North America, United States

"This new era – in which people carry incredible computing power with them everywhere they go – is completely changing our lifestyles."

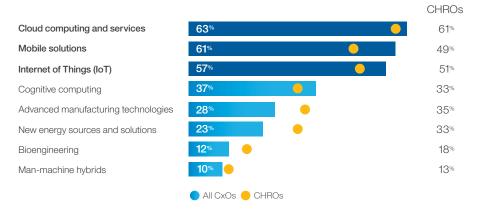
CHRO, Banking and Financial Markets, Turkey

# How to do it: Exploit technology to enhance the employee experience

So how are CHROs preparing to enhance the employee experience and manage change more effectively? They concur with other CxOs in thinking three specific technologies – cloud computing, mobile solutions and the Internet of Things (IoT) – will revolutionize the way they do business over the next few years (see Figure 4). Collectively, these technologies have major implications for the workforce and for HR service delivery alike.

Figure 4

Triple play: CHROs, like other CxOs, see cloud, mobility and the IoT as revolutionary



#### Implications for the workforce

Cloud computing and mobility have jointly untethered people from their desks and facilitated the development of "asset-light" business models. This has various implications for the workforce. It reshapes the relationship between employee and employer, alters the way many activities are performed and brings about significant cultural changes.

In a cloud-based world, employees can share resources and collaborate more effectively. And with mobile solutions, they can get access to information "on the go" – enabling them to do things they couldn't do before. A retail associate can instantly check whether something is in stock and show customers alternative options, for example.

But while employees enjoy more flexibility, they're also at greater risk of suffering from "device burnout." Mobility blurs the lines between work and home life – and some people struggle to disconnect from their jobs. The French government recently took steps to curb the problem with a rule restricting access to email outside working hours in certain sectors.<sup>6</sup>

There are other issues, too. Employees now have to compete with the "human cloud" – the vast reservoir of freelancers offering a wide range of services on demand. Numerous online platforms matching employers with independent workers have sprung up in the past few years. This provides easy access to talent but could leave employees feeling vulnerable.

The IoT may have an even bigger impact. It will create work by generating huge amounts of data, all of which must be managed. But it could also eliminate some forms of work, with onsite security sensors replacing security guards and self-driving trucks replacing truck drivers, for example. U.S. manufacturer Freightliner has launched the first autonomous big rig. A human being still has to sit in the driver's seat, but that won't be the case forever.

"The employment model is changing. Businesses want labor that flexes with demand."

CHRO, Consumer Products, United States

"We need to utilize cognitive computing and free human beings to engage in the tasks only human beings can perform."

Takio Sudo, CHRO, Pasona Group, Japan

One last technology – cognitive computing – could prove equally revolutionary. Only a third of CHROs currently recognize its potential (as Figure 4 on page 6 shows). Nevertheless, cognitive computing holds great promise. Whereas conventional algorithm-based systems are limited by what they've been programmed to do, cognitive systems learn through experience and apply what they've learned to new inquiries.

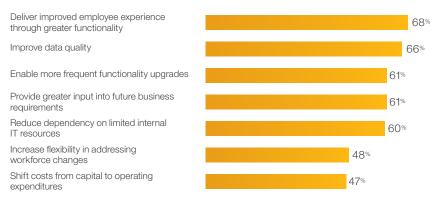
Cognitive technologies will change the nature of work by allowing people to harness the increasing volume of data that's being created. They will also provide practical feedback on how employees can improve their performance and enable closer coordination of human-machine interfaces. They can, for example, help research scientists make new discoveries and doctors pinpoint the best way of treating patients with complex diseases. Similarly, they can help wealth managers address their clients' needs more effectively by matching each client with the most appropriate financial products and services.

### Implications for the HR function

These same technologies will have a profound impact on what the HR function does and how it delivers many services. Cloud computing will, for instance, enable CHROs to provide better employee experiences and offer a wider array of self-service options. It will also help them improve the quality of the data they collect and dispense with routine activities such as functionality upgrades (see Figure 5). They can then concentrate on more value-added activities, like analyzing and interpreting the data more efficiently and using the insights that emerge to make more informed decisions.

Figure 5

Cloud control: CHROs are turning to cloud computing to improve the employee experience and collect better data



As mobility alters the way people work, the HR function will also be expected to provide round-the-clock access to mobile learning solutions, performance aids and expert advice. Moreover, the CHRO will have to liaise with the Chief Information Officer (CIO) to design a clear device management policy. One key question is whether to let employees bring their own devices to work, which can boost productivity but exposes enterprise systems and data to greater security vulnerabilities.

"We're moving to mobile interaction with our customers. Our employees want the same thing; they expect mobile learning on demand, employee information and services delivered through online channels."

**Lee Yan Hong,** Managing Director and Head, Group Human Resources, DBS Bank, Singapore

"Cognitive computing will have a profound impact on HR. I envision great leaps in terms of guidance on human capital."

CHRO, Electronics, United States

The shift to mobile working will, likewise, entail reinventing PC-based HR processes such as recruitment, performance feedback and employee surveys. Social recognition company Globoforce has already entered this market, with the launch of an app that lets employees nominate, endorse and congratulate fellow workers. Similarly, CHROs will need to use mobile technology to provide shared services support via tools like text messaging.

The IoT will bring other changes. With sociometers (smart badges that track how people interact with each other), employers will be better able to design workplaces that foster collaboration. Smart devices provide the means to customize environmental factors such as ambient temperature, lighting and noise – all of which can have a major impact on employee output – as well as warning staff about potential safety hazards. However, this must be done without invading people's privacy.

Cognitive computing will also open up new service delivery opportunities, such as individualized "concierge services" to help employees develop new skills and identify new career paths. It will allow CHROs to detect previously undiscovered patterns, including trends in employee efficiency, engagement and retention, and put corrective measures in place. Lastly, it will facilitate more proactive recruitment procedures, using external data from sources like LinkedIn and internal data on existing staff to assess a candidate's suitability.

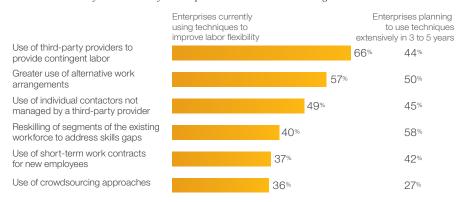
To sum up, new technologies will impose new obligations on the HR function. But they will also provide a deeper understanding of employees and would-be employees, including their abilities, individual needs and preferences, and how they collaborate with other people. Above all, these technologies will enable CHROs to deliver better employee experiences, make their organizations more appealing and increase productivity.

## What you need to do it: Become flexible, analytical and social

Even so, most enterprises won't be able to rely on in-house resources alone to provide the rapidly changing mix of skills they require. Nor can they manage their future staffing needs effectively if they can't anticipate hiring trends, forecast skills shortfalls or comprehend what employees actually want. Three further elements will thus be crucial: a flexible approach to talent acquisition, predictive analytics to make more accurate workforce decisions and social tools to capture employee input.

Many CHROs realize this. Two-thirds of them told us they already use third parties to provide contingent labor. More than half also use flexible work plans, telecommuting and the like. Many intend to continue using such techniques. What's more noteworthy, though, is the marked increase in the percentage of CHROs who plan to address future skills gaps by retraining existing employees and bringing in new staff on short-term contracts (see Figure 6).

Figure 6
Flexible talent: Many CHROs now rely on third parties and alternative work arrangements



"One thing that I would like to personally influence is transforming our organizational culture to adopt a flexible business model."

CHRO, Banking and Financial Markets, Australia

"With predictive analytics, we'll be able to explore 'what might happen' rather than looking at 'what has happened."

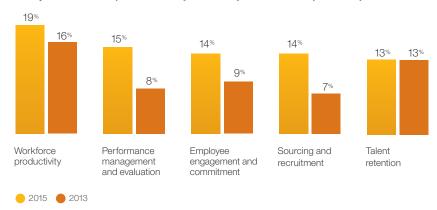
Lucien Alziari, CHRO, A.P. Moller Maersk, Denmark

A small – but increasing – number of CHROs are also using predictive analytics to manage workforce issues (see Figure 7). Building an effective analytics capability isn't easy. It requires a cadre of new HR workers with different skills: data architects, statistical modelers and even storytellers. But, most of all, analytics requires a degree of trust between the HR function and the rest of the business. The HR function must trust the business units to act on the answers it produces, while the business units must trust the methodology and assumptions the HR function uses to produce those answers.

Nevertheless, the benefits justify the investment and effort required. Developing robust models to forecast dynamics such as employee turnover and future levels of supply and demand for specific skills helps an organization anticipate and mitigate forthcoming

Figure 7

Future focus: The number of CHROs who use predictive analytics to make more informed workforce decisions is rising



workforce challenges. In fact, the most proactive HR functions can even measure the probability of particular individuals leaving their jobs, given the behavior of other employees with similar characteristics, and therefore act to retain the most talented people.<sup>9</sup>

Moreover, some companies are making strides when it comes to listening to what employees have to say – be it reporting feedback from customers, making suggestions or commenting on other work-related matters. Nearly half of the CHROs who participated in our study use social tools to find out what employees think about general business issues. However, the number of CHROs who use social approaches to capture new ideas and track employee sentiment on an ongoing basis is somewhat smaller (see Figure 8).

Listening to employees can help them feel more valued, improve decision making and stimulate innovation. It can also provide an early warning of internal problems that could cause disaffection if they're not promptly addressed. But annual snapshots in the form of employee surveys aren't enough, when content can go viral in a few hours. Organizations have to create a continuous dialogue with employees, just as they do with customers.<sup>10</sup>

Figure 8

Digital dialogue: Social tools can help CHROs capture key employee insights

Engage individuals through ongoing dialogue about the business

Generate and capture new ideas and innovations

Understand employee sentiment on an ongoing basis

48%

"We'll be able to spotlight areas where collaboration and open exchange of ideas via a social network improve the performance of the workforce and thus our business results."

CHRO, Industrial Products, Brazil

## "We need a chessboard of new executive capabilities."

Peter Fasolo, CHRO, Johnson & Johnson, United States

## Seize the initiative

CHROs know they need to prepare for a future in which disruption is pervasive: a future in which technological advances are increasingly blurring the distinctions between different industries and new competitors are emerging from "left field." Coping with these upheavals will entail finding people with new, sometimes scarce skills; dealing with sensitive issues such as job displacement; managing a more flexible, transient workforce; and helping individuals at every organizational level handle enormous amounts of change.

So how can CHROs maintain an edge as the talent landscape is redefined? Our respondents provide lessons from which CHROs across industries and regions can profit.

#### What to do: Redesign your talent acquisition model

Establish ongoing processes to target the talent your organization will need to differentiate itself in a rapidly changing world. Develop creative marketing techniques and provide analytical tools to attract, acquire and onboard a new generation of individuals with rare or unique skills. Build flexibility through partnerships with third-party providers capable of supplying competencies that can't be easily acquired at scale.

## How to do it: Reimagine the employee experience

Focus on the employee experience as you would on the customer experience. Use analytics to understand different employee segments and their concerns. Invest in the key touchpoints where employees' experiences have a major impact on engagement levels and productivity. Work with the CIO, CMO and real estate partners to tailor the employee experience within the context of your organization's needs. Deploy rapid, iterative design principles to test and modify new ways of delivering employee experiences.

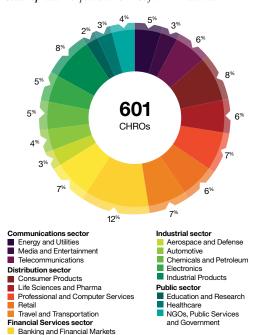
## What you need to do it: Rethink HR services for the cognitive age

Assess how technology can help you expand the strategic scope of the HR function as well as improving your organization's operational efficiency. Consider using cloud-based software to provide best-in-class services and reduce reliance on the IT function. Leverage mobility to give employees information and insights, when and where they're needed. Incorporate social techniques to amplify the "employee voice." Investigate using cognitive digital assistants to improve employee self-service and enhance the HR function's decision-making capabilities.

You can find "Redefining Boundaries," the first installment of our latest Global C-suite Study at ibm.com/csuitestudy, or via the IBV tablet apps on iOS and Android.

Insurance

Figure 9
Sector spread: We spoke with CHROs from 18 industries



## How we conducted our research

In 2015, we surveyed 5,247 business leaders in more than 70 countries for our latest C-suite Study, the eighteenth IBM study to focus on the C-suite. We used a two-dimensional rake weighting process to correct for oversampling issues arising from differences in the number of respondents in a given role or region. This report focuses on the responses of the 601 CHROs who participated in our research (see Figure 9).

#### For more information

To learn more about this IBM Institute for Business Value study, please contact us at iibv@ us.ibm.com. Follow @IBMIBV on Twitter and for a full catalog of our research or to subscribe to our monthly newsletter, visit: ibm.com/iibv

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## Notes and sources

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