

# Strategies for building and maintaining a skilled workforce

An IBV study summary:  
The enterprise guide to  
closing the skills gap



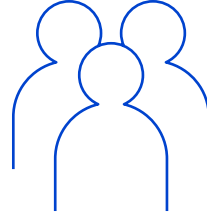
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## Overview: A perfect storm results in a global talent shortage

Our world is living through an unprecedented moment for humanity that touches every aspect of business and culture. IBM is passionate about technology and how it can support clients and society during these challenging times.

Throughout history, the skills of talented humans have been the impetus for economic growth. Today, rapid technological change and business model innovation have contributed to market shifts that are redefining industries. Combined with economic and market disruptions, these factors have created a perfect storm that's affecting the value of, the need for and the availability of workforce skills.



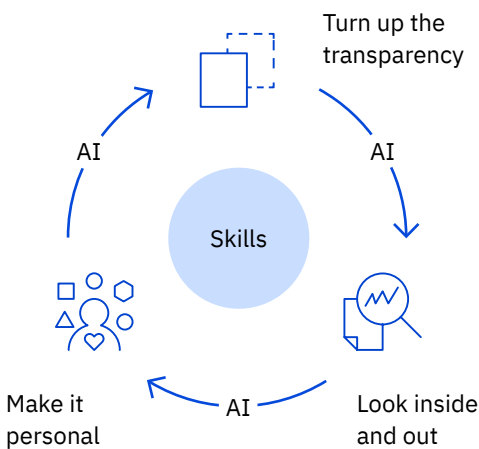
By 2030, the global talent shortage could reach more than 85 million people<sup>1</sup>—not a shortage of workers, but a shortage of workers with the right skills.

## Addressing the skills challenge with AI

The IBM Institute for Business Value (IBV), part of IBM Services, develops fact-based, strategic insights for senior business executives on critical public and private sector issues.

They examined the different skill development tactics being used today to understand if any are impacting skill gaps. Implementing skills recognition initiatives and applying analytics to predict skills supply and demand topped the list,<sup>4</sup> yet these tactics remain surprisingly underused. Why? It may be because they're not one-size-fits-all, plug-and-play solutions suitable for every enterprise. Rather, they're signposts for positive action that's continuous, analytical and strategic.

From this study, IBM has identified **three key actions** as critical to the skills conversation, each being strengthened by AI. See Figure 1.



*Figure 1:* Skills at the core: AI can help enable transparency and skills personalization in an expanded learning ecosystem.



Gartner predicted that by 2020, artificial intelligence (AI) will actually create more jobs than it eliminates,<sup>2</sup> and it cited the talent shortage as the top emerging risk facing organizations today.<sup>3</sup>

## Close the skills gap with a modern three-pronged workforce strategy

### Make it personal with the power of AI

Personalization has become part of consumer life and employees expect the same in their work environment. To that end, companies want to make an impact with personalization at scale. This personalization means understanding the current skills of every employee, knowing what they need to succeed, and personalizing a learning and career path for them. AI enables this level of personalization, bringing a meaningful employee experience to life. Companies are also looking beyond traditional learning methods, growing skills in different ways for different learning styles with programs that encourage internal job mobility, ad hoc projects, peer-to-peer learning, job shadowing and coaching. Most importantly, companies are fostering a culture of perpetual learning, personalizing the parts of the employee lifecycle to build, grow and reward continual skill growth.

### Turn up transparency

Leading companies are transparently providing employees with engaging, meaningful ways to grow their skills and demonstrate proficiency. This new level of automated transparency provides information to self-direct learning and career choices. This approach assesses and measures the skills—and skills depth—of the workforce on a regular, automated basis. The outcome is a transparent, objective, reliable baseline to monitor a company's skills position over time with details for targeted workforce planning. Companies are also using this information to inform a skills and learning platform that provides top-to-bottom visibility into the existing skills of the workforce. It connects the right resources when they're needed most and drives the personalized learning experience.

### Embrace the value of the ecosystem

To remain competitive, companies must adopt an open technology architecture and a coalition of savvy partners to continually explore and pilot innovative skills gap closure strategies. Culture shifts require welcoming third parties to the team, engaging them to manage specific data integration functions across the enterprise and ecosystem—not experienced to date—yet vital to success. To prepare, companies should take advantage of a hybrid cloud solution for open flexibility and securely enable data integration. Inside the organization, they must build agile teams with heterogenous skill sets to enable experiential, peer-to-peer innovation and create a culture where learning becomes viral. They must identify the key skills needed for success and align their future skilling strategy throughout the entire employee lifecycle.



“Our most important priority in HR is finding talent for the future, not just for now. We’re focused on the formidable challenge of attracting, developing, and retaining employees with skills we haven’t yet determined.”

– CHRO, Banking, New Zealand



## Closing the global skills gap

The status quo isn't an option for those organizations who want to remain competitive and aligned with the technological curve while closing the skills gap. Executives can start today by committing to a modern workforce strategy that:

- Places skills at the center
- Delivers deep visibility into the skill position of the enterprise and employee
- Personalizes skills development at scale
- Uses new partnerships and platforms that integrate data and insights across the employee lifecycle

## The time to act is now

At IBM, we collaborate with our clients, bringing together business insight, advanced research and technology to give them a distinct advantage in today's rapidly changing environment.

For more information about addressing the skills shortage, read the full report:

[The enterprise guide to closing the skills gap](#)

Other related areas of interest:

[Discover the power of IBM Garage](#)

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[Enable your workforce for resiliency](#)

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## The right partner for a changing world

At IBM, we collaborate with our clients, bringing together business insight, advanced research, and technology to give them a distinct advantage in today's rapidly changing environment.

## IBM Institute for Business Value

The IBM Institute for Business Value, part of IBM Services, develops fact-based, strategic insights for senior business executives on critical public and private sector issues.

## For more information

To learn more about this study or the IBM Institute for Business Value, please contact us at [iibv@us.ibm.com](mailto: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/ibv](http://ibm.com/ibv).



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### Citations

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