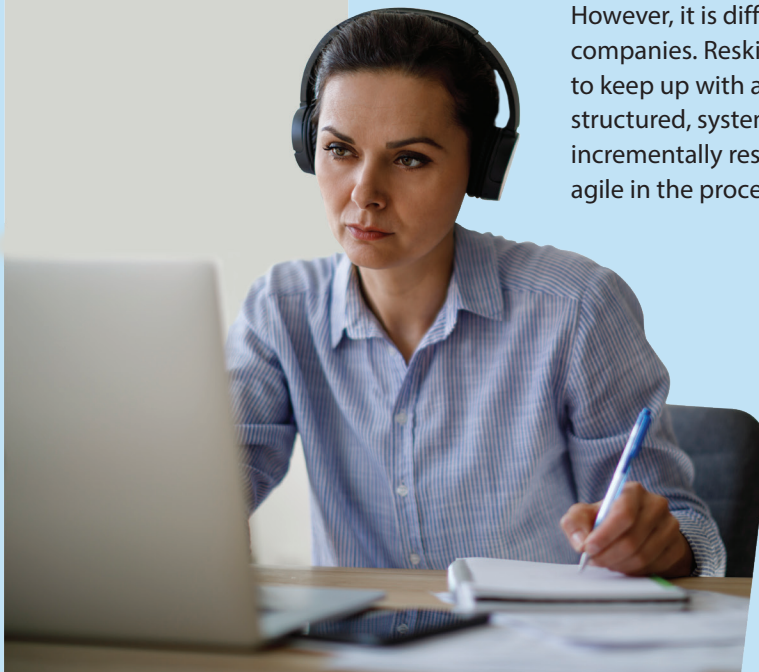


## CREATING A DIGITAL TALENT PIPELINE

Reskilling is gaining traction as an important talent strategy, not only to close skills gaps but also to improve recruitment, retention, and diversity. However, it is difficult even in the best of times for most companies. Reskilling has now taken on new urgency to keep up with accelerating technology. With a structured, systematic approach, organizations can incrementally reskill their workforce and become more agile in the process.



Reskilling is a well-known solution for closing skills gaps, that is, the mismatch between skills organizations need and the skills workers have. Outside technology companies, however, most have typically not taken this route because the return on investment has not been clear.<sup>1</sup> Now, all companies are digital companies.<sup>2</sup> Skills are becoming obsolete faster than ever before. The best long-term strategy for all companies is to invest in reskilling now.

Aside from its benefits to organizations in closing skills gaps, reskilling is also valuable to employees. It gives them the chance to grow and learn in their careers, satisfying a need for learning and career progression. More fundamentally, reskilling provides job security — people can evolve their skills to keep up with the changing job market.

## The demand for reskilling

Digitalization, automation, artificial intelligence, and robotics are changing the labor market and the supply and demand of skills. By 2025, automation is expected to displace 85 million jobs and create 97 million new jobs.<sup>3</sup> Reskilling obviates the need for companies to lay off millions of people without these skills and to hire millions more. Thus, reskilled workers can fill many of these 97 million new jobs, bringing their complementary skills, organizational knowledge, and human networks to bear on these new job needs.

At Infosys, we have seen a skills disruption as our digital services have increased. Like all businesses, we increasingly need more workers with digital skills on new technologies. However, because the technology is so new, there are often not enough workers in the market with these skills.

We have decided to use reskilling as the path to filling this gap, with more than half of our digital services talent being added through reskilling (see Figure 1).

Reskilling is a promising way to meet the demands of the rapidly changing labor market

Many companies are following suit. As of October 2020, the World Economic Forum found that about one third of large global companies said they have accelerated reskilling or upskilling programs. This is in sharp contrast to the previous year, when a similar survey showed few companies were investing in this.

Although the momentum is shifting toward reskilling, organizations are finding it's not as simple as flipping a switch. A November 2020 KPMG survey found that 72% of human resources (HR) professionals rate reskilling as

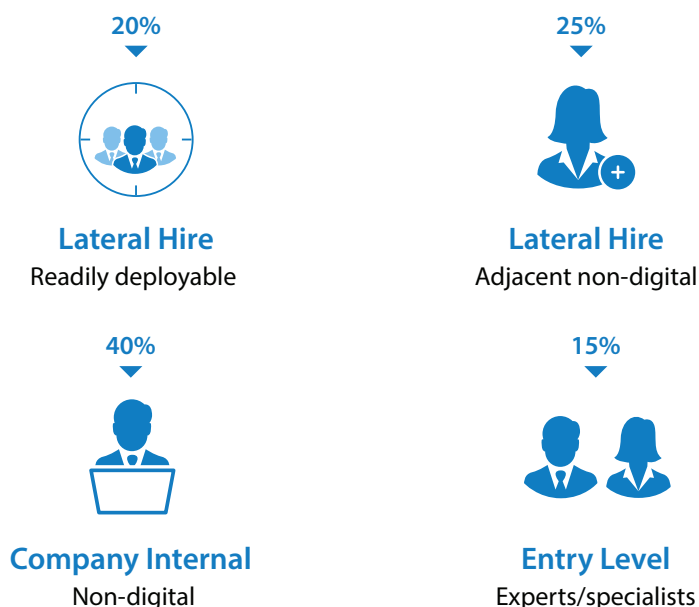
highly important to shaping the workforce — but only 33% rated it as easy to implement.

## Case study: Digital reskilling at Infosys

At Infosys, our training has evolved — alongside our operating model — for the digital age. We have applied the lessons of more than three decades of training new employees, from physical classrooms in India to our online digital reskilling program.

In about 2016, we changed our operating model from being organized around industries to a horizontal model. This new model is based on creating capabilities that are both tailored to individual customers and part of integrated offerings. Our holistic reskilling programs were born of these changes: We needed talent that supported new digital offerings.

Figure 1. Nearly two thirds of our digital services talent are being filled through reskilling.



Source: Infosys

These programs bring new opportunities to workers in a variety of ways. Working counterclockwise in Figure 2, programs include continuous, self-paced learning for employees; collaboration with academic institutions; specialized programs for local hiring; and the focus of this article, digital reskilling for new and current employees.

## Developing the digital reskilling program

We developed our holistic reskilling program incrementally, in four phases (see Figure 3), evolving it alongside changes to our operating model. We are currently in Phase 4, scaling the program across the company.

In Phase 1, **Foundation**, each unit created a three-year business growth projection for the top five digital skills; these were called new service offerings (NSOs). The units also created talent plans to meet the anticipated business growth projections for each NSO. This resulted in 36 new offerings, with the top five skills needed for each.

This new plan widened skills gaps, so we built a more robust system and workflow for continuously capturing skills and mapping employees to skills. As employees work on projects, their skills get updated automatically. The employee-skill data is used in recruiting, maintaining the training curriculum, talent enablement, demand fulfillment, project creation and labor systems, performance reviews, responding to requests for proposals, and client presentations, and for planning skills needed.

In the next phase, **Skills Forecasting**, we planned for both long-term (five years out) and short-term (quarterly) skills needs. We used a variety of external and internal inputs for this forecasting model, including revenues, employee skill data, past allocations, and market trends.

Figure 2. Digital reskilling is one part of Infosys's holistic reskilling program.



Source: Infosys

**Implementation** of digital reskilling program was next, in Phase 3. This enabled reskilling as an alternative talent pipeline. More than 90% of these reskilled employees have been deployed to projects using their new skills.

Today, we are in Phase 4, **Scaling**. We are encouraging people to take up learning and to create awareness of the reskilling program. Employees are motivated to do the program in part for concrete financial and career incentives. For instance, they receive financial incentives based on certain eligibility criteria.

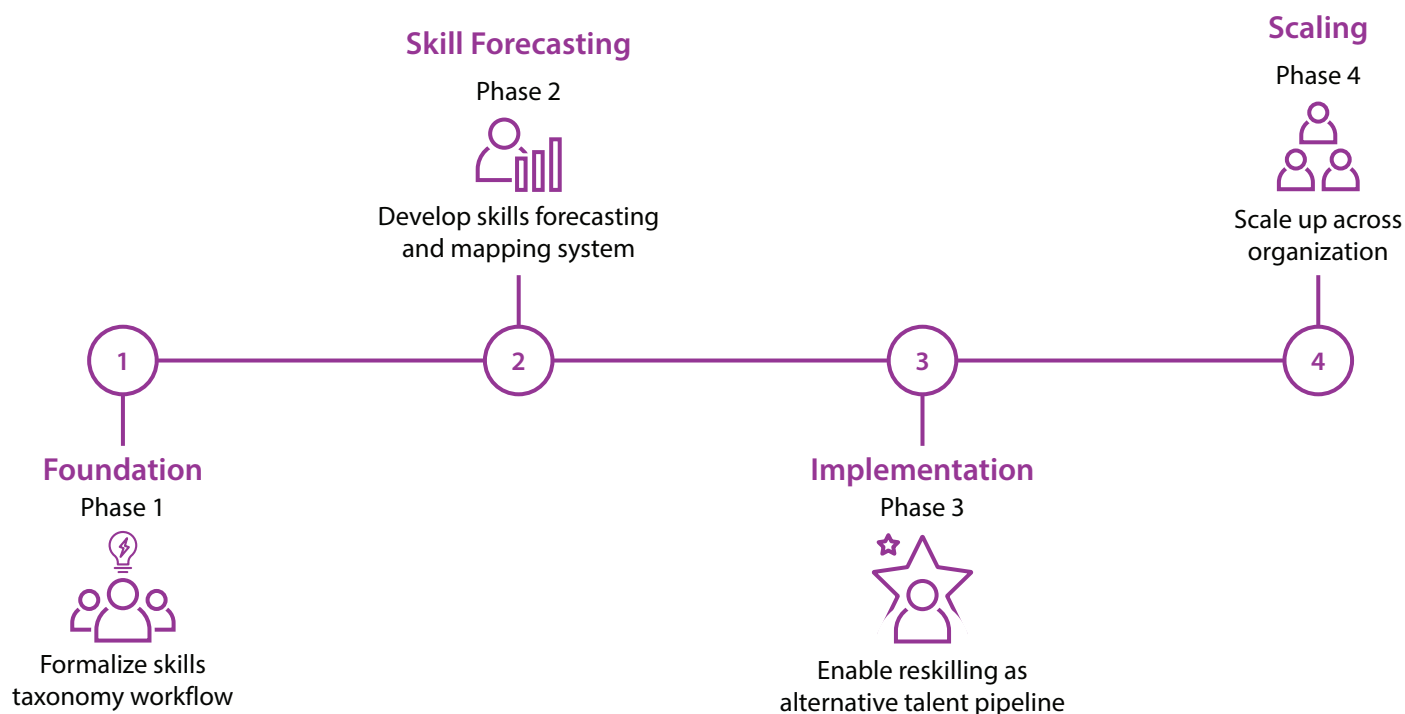
Career incentives include skill tags. These skill tags quantify what they have learned in a way that is recognized in the market. For instance, “Cloud Professional” is a tag employees can earn to indicate they have those high-demand skills and can work on new projects internally and with our clients.

In the Scaling phase, we have also focused on communicating the many benefits of reskilling. This communication happens at several levels — with leaders, with managers, and with employees. We also send out a series of weekly emails on reskilling to all employees, which increases awareness of reskilling opportunities.

## Digital reskilling framework

Figure 4 provides an overview of the framework we have developed. This framework covers the two pathways for digital reskilling programs — a full-time and a part-time program — and is based on continually refreshed content. The reskilling framework was designed by cross-functional teams from training, business, talent planning and deployment, HR, and organizational development.

Figure 3. Phased timeline for planning and implementing the holistic reskilling program.



Source: Infosys

We develop most content internally, tying it to our offerings and strategy. For instance, for the digital offerings aligned to the five strategy categories (Accelerate, Innovate, Insight, Experience, Assure), we created learning paths with mandatory courses and certifications.

In either case, the first step is to identify recent hires and internal employees for the program. They then go through a defined learning path, completing about 150 hours, followed by assessments and earning internal or external certifications.

The program also includes hands-on, real-life experience before employees can earn a certification. Employees are then mapped to new opportunities and become part of our digital services talent pool.

## Benefits of reskilling

Fundamentally, reskilling is a win-win: It is good for both organizations and workers. We have found that it is

about half the cost of hiring from the market.<sup>4</sup> Reskilling has also lowered our attrition rate by about 100 to 150 basis points.

Reskilling has wider benefits, too. Indirectly, it is a micro-change that can equip employees with an Agile mindset and transform organizations.

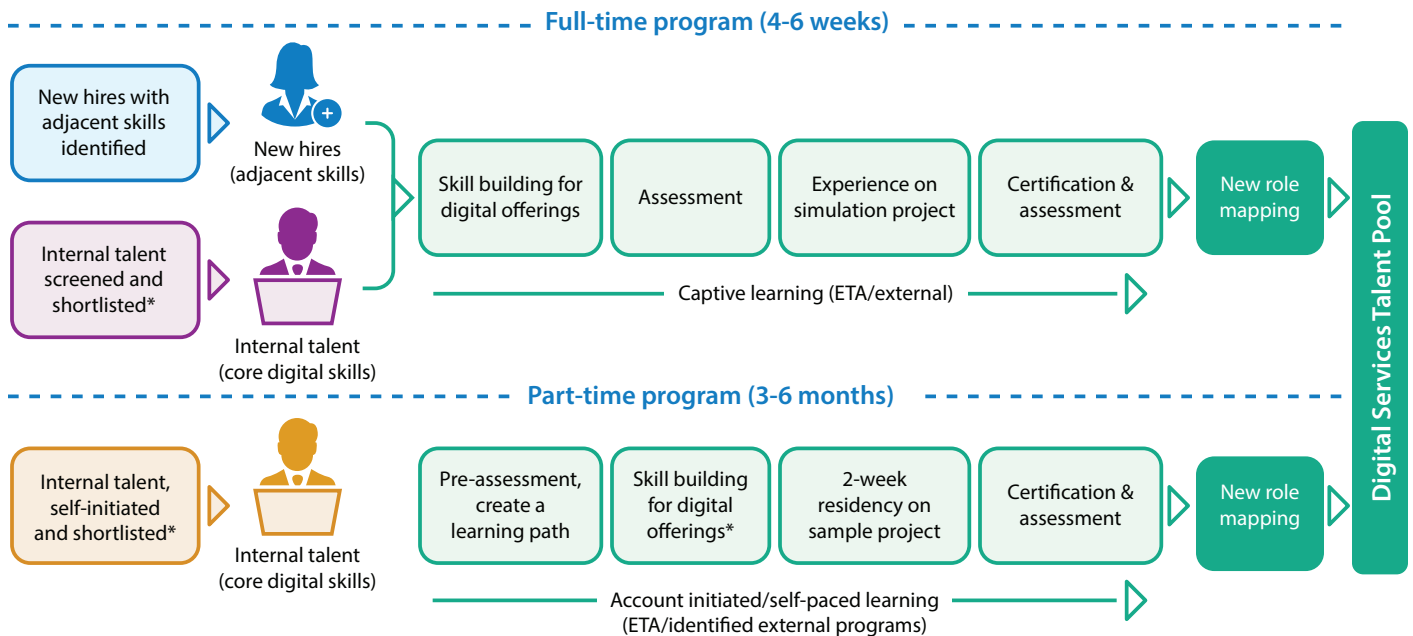
Reskilling helps employees learn and change careers while on the job; for example, from being a Java programmer to a big data professional. A software professional with programming and database skills might be trained on technologies and frameworks in big data and NoSQL. This reskilled employee will then be able to implement various stages of the data life cycle and perform detailed analysis on very large datasets involving structured, semi-structured, and unstructured data. This role requires a significant understanding of NoSQL databases, Hadoop (a distributed batch-processing framework), and Spark (a high-speed cluster computing framework).

As another example, a software developer with experience in developing web applications might be trained in digital commerce or digital marketing concepts. Thus, a web developer learns a host of new skills: content management solutions, portals, mobile apps, how to improve the customer experience, digital transformation. Reskilling thus requires some domain knowledge, some product knowledge, and some experience, and the training under expert guidance enables employees to become more like digital natives.

Reskilling is beneficial both for companies and employees, and costs about half of hiring directly from the market

Reskilling inculcates a culture of lifelong learning into an organization. Businesses retain talent while employees continually evolve their

Figure 4. Framework for digital reskilling.



Note. Screening and shortlisting can be through unit recommendations, hackathons, and other interventions. ETA = Education, Training & Assessment.

Source: Infosys

skills to match what the company needs. This is a strong value proposition for both the employee and the organization — it improves recruitment, retention, and internal rotation and deployment.

It can also be part of a localization strategy that benefits the company, provides opportunities to work in a digital role for those who might not otherwise have had them, and ultimately increases diversity. For instance, reskilling is a core part of our effort to hire 25,000 U.S. workers by 2022. This initiative includes partnerships with community colleges outside Silicon Valley, such as in the Midwest.<sup>5</sup>

Reskilling fosters a culture of lifelong learning

Despite the conventional wisdom that the per capita cost for localization is higher, we have found this to not be the case if a core part of your

localization strategy is reskilling.<sup>6</sup> In addition to reskilling driving down hiring costs, proximity to clients saves costs, too. We believe that localization will be an even more important strategy in the period of deglobalization many expect in the wake of COVID-19.

Localization will be an important strategy going forward

## Challenges to reskilling

Effective reskilling programs connect the skills the workforce has to what will be needed, provide training, and then deploy employees to work where they will use these new skills. Thus, organizations' reskilling challenges have to do with implementing infrastructure and operational changes necessary to drive return on investment of reskilling.

The first challenge is accurately forecasting what skills will be required.

To do this, organizations need to understand trends in business, technology, and society. Organizations also need to plan their own direction to anticipate the skills needed for their future.

Another skills mapping challenge is timing and deployment: After identifying what skills will be required, workers need to be trained at the right time. If too early, their skills won't be used and may be forgotten; if too late, the opportunity may have passed. When people aren't quickly able to use their new skills at work, reskilling is demotivating for both the organization and the employee.

Many forecasted skills use technology that is so new that training materials don't yet exist — let alone opportunities for hands-on experience. Where there are training materials, they need to be personalized, geared to an employee's current skill level. Employees may also need encouragement and a safety net to feel comfortable moving out of their comfort zone and into a new area where they are not confident.

In the past, people were trained in classrooms; that burden is more squarely on companies now. Creating a digital infrastructure for reskilling is a challenge, so many companies are adopting their own internal platforms with curated content so people can learn at their own time, own pace, and in any setting.

## Recommendations

Reskilling should be one of the primary strategies that companies use to add the skills they need. We have four broad approaches to reskilling. These draw on our cumulative experience from training employees in Infosys's early days in the 1980s to our more recent digital reskilling program.

Companies should leverage reskilling to add their desired and required skills

1. **Make reskilling a core pillar of the operating model.** Without infrastructure and operational changes, employee reskilling programs are destined to fail. They need to be tied to strategy, direction, and other investments.
2. **Assemble cross-functional teams.** A successful reskilling program requires participation across the

organization. Focused, weekly efforts on reskilling with the leadership of many units is essential to continuously plan and assess reskilling progress.

3. **Don't go it alone.** For greatest impact, collaborate with academic institutions, nonprofits, other companies, and governments. Infosys, for example, has a learning platform that we use for our digital reskilling program and other employee learning initiatives. We formed a consortium with other companies in which we will use this platform to reskill pandemic-impacted job seekers and connect them with companies looking for workers.<sup>7</sup>
4. **Make employees part of the process.** Create enough incentives, necessary infrastructure, and support — especially during the transition phase.

## Conclusion

Investing in people is the best investment companies can make, and reskilling is one of the best strategies for closing ever-widening skills gaps. Reskilling has benefits that extend further, though — to the organization more broadly, to employees, and, potentially, to society.

Reskilling has benefits that extend beyond closing skills gaps — it benefits the organization more broadly, employees, and potentially, society

Employee learning programs like reskilling are cost-saving measures that help organizations themselves learn, adapt, and evolve.<sup>8</sup> At the same time, reskilling helps meet employees' basic human drive to learn. It also strengthens the employer-employee relationship because employees feel valued and cared for. More generally, then, reskilling contributes to a healthier organizational culture.

Finally, reskilling brings opportunities to people who might not otherwise have them. Our reskilling initiatives with community colleges, for instance, enable us to employ people at a lower cost — while at the same time giving a wider swath of people the opportunity for upward social mobility.

## References

- <sup>1</sup> [Towards a reskilling revolution: Industry-led action for the future of work](#), World Economic Forum with Boston Consulting Group, January 2019.
- <sup>2</sup> [Digital Quotient: Lodestar for future-ready talent](#), Nandini S., January 2021, Infosys Insights.
- <sup>3</sup> [Future of jobs report, 2020](#), World Economic Forum, October 20, 2020.
- <sup>4</sup> [It's time for a reskilling revolution: Here's why](#), Ben Eubanks, Human Resource Executive, August. 22, 2019.
- <sup>5</sup> [Workforce development in the age of digital](#), Infosys, 2019.
- <sup>6</sup> [Infosys is hiring 12,00 people — and not from the Ivy League](#), Shakeel Hashim, September 8, 2020, Protocol.
- <sup>7</sup> [Infosys launches Reskill and Restart: An innovative solution to reskill the American workforce and fulfill employment needs following COVID-19](#), July 22, 2020, PRNewswire.
- <sup>8</sup> [The live enterprise: Create a continuously evolving and learning organization](#), Jeff Kavanaugh and Rafee Tarafdar, January 2021, McGraw-Hill.

## Contributors

### Arindam Ghosh

*Associate Vice President,  
Human Resource Development, Infosys*

### Anupama Kumar

*Practice Lead,  
Organizational Development, Infosys*

### Santosh Panpaliya

*Vice President and Head,  
Human Resource Development, Infosys*

### Deepak Gupta

*Vice President and Delivery Head, Infosys*

### Sarma K.V.R.S.

*Senior Lead Principal, Education,  
Training, & Assessment, Infosys*

### Saraswathi C.

*Senior Principal,  
Organizational Development, Infosys*

### Ravi Kiran Kuchibhotla

*Vice President and Senior Group Manager,  
Unit Strategy, Planning, and Operations, Infosys*

### Jyoti Nayak

*Group Manager, Talent Planning and  
Deployment, Infosys*

## Authors

### Rajeev Ranjan

*Senior Vice President and  
Service Offering Head, Infosys*

### Thirumala Arohi

*Vice President and Head, Education,  
Training, & Assessment, Infosys*

### Ramesh Amancharla

*Vice President and Head,  
Talent Planning and Deployment, Infosys*

### Nikki Seifert

*Infosys Knowledge Institute*



---

## About Infosys Knowledge Institute

The Infosys Knowledge Institute helps industry leaders develop a deeper understanding of business and technology trends through compelling thought leadership. Our researchers and subject matter experts provide a fact base that aids decision making on critical business and technology issues.

To view our research, visit Infosys Knowledge Institute at [infosys.com/IKI](https://infosys.com/IKI)

---

For more information, contact [askus@infosys.com](mailto:askus@infosys.com)



© 2021 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.