

Fit to compete: Accelerating digital
workforce transformation in
financial services



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The financial-services (FS) industry has a pervasive problem with its workforce. In [PwC's 2019 Global CEO Survey](#), 54% of FS chief executives said that skills shortages hindered their firm's ability to innovate effectively. These companies are investing vast amounts of money in digital technology. They are compelled to change, if only because of the disruptive threat of new digitally enabled competition. FS firms are thus modernising their technology systems, boosting innovation, automating to drive down costs and adapting the user experience to meet the rapidly changing expectations of their customers. Yet no amount of digital investment can help them fully attain their new financial and productivity goals when the workforce is stuck in analogue.

A variety of factors related to talent are sparking the industry's efforts to raise its digital proficiency. Banks and funds [no longer hold an edge](#) in graduate recruiting. This has forced a sharper focus on employee experience and the organisation's professed purpose. The technical skills, data analytics proficiency and design thinking that FS firms need right now all call for highly skilled people. These individuals, whether long-standing employees or new recruits, tend to be impatient with legacy infrastructure and what they see as outmoded, bureaucratic ways of working. According to [PwC's 2018 Tech at Work survey](#), only 68% of employees are satisfied with the technology their company offers. Employees also increasingly want to work for companies that incorporate high-tech values — companies that are agile and digital. Some people don't see themselves as working for a company at all; they prefer to think of work as a collaboration with their employers and their peers. Many are interested in social responsibility; they want to work for purpose-driven companies. And nearly all expect a high-touch, engaging, even personalised workplace experience.

At the same time, customers are becoming more sophisticated in their demands for digitally enabled products and services. The institutional boundaries that defined the FS industry for years are dissolving, and banks and insurers are embracing new kinds of customer offerings, new channels through which to offer them, and new types of experiences and journeys. As a response to all these factors, many FS companies are transforming their ways of working. They are embracing artificial intelligence, data analytics and design thinking. But their existing workforce may not have the skills needed to keep up. FS firms are thus doubling down on a commitment that might not have been on their radar a few years before: a commitment to digital upskilling.

This comprehensive report is for leaders of the financial-services industry who need to think about every aspect of workforce transformation. It draws on the experience of many banking, insurance and wealth management firms around the world, with recognition of the challenges that remain and the work still to be done. First, we lay out the basic concepts and practices of a digital workforce transformation, and the impact they could have on the organisation. We then explore opportunities for digital upskilling across FS sectors (insurance, banking and capital markets, and asset management) and in different regions across the globe. We explain how digital transformation has generated a strong demand for new competencies, and describe the resulting talent strategies among leading FS companies. Drawing on PwC's own experience in digital workforce transformation, we describe ways of building skills through apps and gamification. We also explain how to measure the return on investment (ROI) for upskilling endeavours, which is extremely significant for the continued success and evolution of the process. We conclude with foundational steps for workforce transformation in the financial-services industry, explaining how an FS business can immediately begin to raise its capabilities and ensure that it is fit to compete.

A human endeavour

Talent, rather than technology, drives digital transformation. Yes, it's the technology that opens up huge possibilities for improving what you offer and how you operate: super-fast transactions, low-cost data processing, analysis of terabytes of customer data, digital interfaces on customers' personal devices and more. But talent is the most critical enabler for successful change.

Talent, in this context, doesn't just mean the people who work for you directly. It encompasses the people involved in every aspect of your business: the ventures you join, the alliances you create, your outreach to the broader society and your engagement across organisational boundaries. It may also refer to contractors or groups employed by you, and the shared workforces of the platforms of the future.

Success in this domain is holistic. You develop capabilities for your workforce as a whole, rather than just providing a few selected skills related to particular technologies. To be sure, a digitally enabled business needs skilled specialists such as robotics engineers, artificial intelligence (AI) trainers and cybersecurity experts. Nonetheless, as more operations become automated, the innately human capabilities that can't be replicated by machines, such as creativity, emotional intelligence (also known as the emotional quotient, or EQ) and communication skills — together

referred to here as core skills — are becoming ever more valuable, especially when combined with technological acumen.

Unfortunately, people with both digital skills and core skills are in desperately short supply, not just in FS, but in the labour market at large. As described in the 2019 PwC report [*The productivity agenda: Moving beyond cost reduction in financial services*](#), research has found that the biggest barrier to digital innovation isn't technology, process or data, but a lack of skilled teams. Back in 2009, in PwC's annual global survey of chief executives (the same CEO Survey mentioned above), only about half of the FS leaders who responded had seen skills shortages as a threat to their growth prospects. This year, in [*the 2019 survey*](#), nearly 80% expressed concern. They say that the shortages are not only putting pressure on costs, but also impairing their organisation's ability to innovate and meet customer expectations.

Is your business up to speed?



A decade ago, FS could outbid almost any other industry on pay. But FS businesses can no longer hire their way to a digital workforce; there simply aren't the returns to make this possible anymore. And even when the funds are available, [FS is losing out to other industries](#) in the competition for top performers. This situation is especially stark given the increasingly competitive employment market in many communities. In early 2019, [United States Department of Labor data suggested](#) that there were 800,000 more open jobs in the US than people to fill them.

As a result of these pressures, firms are spending more on human resources (HR) costs — typically funnelling incremental costs into enhancements in the employee experience. The experience people have at work is becoming a vital part of an organisation's ability to thrive. Employees want their organisations to provide a workplace experience that matches what they've come to expect as customers and in other areas of their life: they want it to be meaningful, personalised, user-friendly and digital. And just as customers can be swayed by their experience with a company, so can employees.

Many FS firms understand that digital upskilling plays a vital role in enabling them to meet financial and strategic goals. However, these goals can only be met through broad-based initiatives aimed at benefiting the well-being of the entire workforce (including those working indirectly or on a part-time basis), and the interests of other stakeholders, as well as the bottom line. This dynamic is illustrated in Exhibit 1, which shows how, in addition to driving key financial goals, upskilling programmes tend to be supported by other strategic imperatives for the organisation and its people.

Exhibit 1: Setting out for successful upskilling

In a well-planned FS digital upskilling initiative, financial growth follows from efforts to build talent and improve the external stakeholder experience. Assessing those efforts across key metrics can help the initiative stay on track.



- **Optimising employee trust:** As shown in the PwC report [Top financial services issues of 2018](#), customers — even years after the financial crisis — are still sceptical of the FS industry, and a focus on building trust is critical. To win back public trust, aggressive regulatory intervention has been implemented within FS markets around the world. Many FS firms are voluntarily strengthening their corporate social responsibility and philanthropic functions, including purpose statements. Some firms are using digital upskilling as an additional lever for doing so. For example, they are making true commitments to upskilling employees — even those they intend to displace — as a demonstration of their commitment to society. Within at least two major FS organisations, one of the world’s largest banks and a leading global asset manager, the top executives have recognised that although the workforce needs of any individual firm are likely to evolve, the firm has an ethical

responsibility to give the workforce the skills it needs and maximise the hireability of the existing workforce in an evolving, and uncertain, employment market.

- **Aligning people’s work to a broader purpose:** Around the world, we have observed FS firms joining with policy makers and local governments to prepare society, including local communities, for the workforce of the future. This includes the cultivation of digital skills as a central element. For example, in 2017, [Citigroup announced a partnership with Cornell Tech](#) to develop digital talent in the New York City labour market. Elsewhere, banks are partnering with local governments to influence the design of educational programmes in line with the future capability needs of society. [Examples include](#) Singapore’s SkillsFuture programme and Luxembourg’s Digital Skills Bridge programme.

- **Fostering a more innovative culture:** Globally, FS firms are seeking to enhance innovation in the products they create, the experiences they offer their customers and employees, and their ways of doing business. Some are establishing formal channels for innovation to complement digital upskilling programmes, including the creation of digital platforms to support virtual collaboration. Many FS firms, including leading insurance companies and banks, have physical innovation labs that encourage in-person collaboration during problem solving — all with the intent of strengthening innovation.
- **Promoting diversity and inclusion:** Some efforts to close the digital skills gap yield compelling diversity and inclusion (D&I) benefits. In Japan, for example — a country with a rapidly aging population where birth rates are low and female participation in the workforce is limited — upskilling strategies for FS firms are



80%

of FS leaders surveyed in 2019 are concerned about skills shortages as an impediment to growth — up from 50% in 2009.



focussed on developing digital acumen in a multigenerational workforce, ranging from millennials to octogenarians.

Other upskilling efforts around the world aim to build more sociodemographic diversity within the banking sector. At least one leading US investment bank has developed a substantial global programme to support community colleges and nontraditional career path training providers, with a focus on upskilling underserved populations. The intent is to build critical technological and other skills within fresh talent pools, to meet the growing demand for digitally skilled workers in FS.

Digital upskilling may feel to some FS leaders like a disorientating shift from the workforce practices of the past, but it can also be enormously empowering to employees. There is a deep-seated wariness within the workforces of many FS firms towards digital technology and its potential for role changes and layoffs, fuelled by headlines warning of ‘robots coming for our jobs.’ Managing

these anxieties is critical to maintaining productivity and engagement — both vital ingredients in these disruptive times. Although FS leaders are split on whether AI will raise or lower the number of jobs available (some industry leaders, including Jamie Dimon of JPMorgan Chase, have expressed the view that overall [head counts will continue to rise despite automation, through the creation of new jobs](#)), companies can work to assure their employees that they will have the right skills to succeed in the market, even if their current position is eventually automated.

As the future of work becomes ever more digitised, you will have new opportunities to make a commitment to your employees’ success. These investments will pay off in the short run in a more energised business. And in the long run, they will give you a strong competitive advantage — with your employees, your customers and the community at large.

What we mean by ‘upskilling’

Upskilling: expanding current knowledge, skills, and abilities to perform new roles within a financial-services institution or adjacent industry.

Examples include:

- Bank tellers transitioning into product development or strategic marketing roles
- IT developers moving to cybersecurity
- Compliance professionals switching to algorithm quality review

Reskilling: building new knowledge, skills, and abilities and adopting new technologies as required to perform augmented roles.

Examples include:

- Financial advisors working alongside robo-advisors to determine the right asset allocation models for client segments
- Risk professionals leveraging visualisation tools and advanced analytics to build new risk models
- Customer service representatives working alongside chatbot channels and building knowledge of additional financial products for banking clients

Building skills for
a digital world:
The PwC experience

At PwC, we've gained firsthand experience of the power of upskilling. Our starting point is a recognition of the opportunities rather than just the threats that come from digital disruption.

In 2018, we launched an internal digital workforce transformation programme. As we look to raise the technological capability of our people to keep pace with client demands, optimise our operations and continue to attract top talent, the programme focusses on building digital fitness across the organisation. Key attributes include being:

- **Business-led:** The enterprise has developed high-value programmes useful for targeting the big, definable opportunities. Digital upskilling is a core business priority, sponsored by our chair. HR enables the programme, but doesn't set the strategy.
- **Citizen-led:** We encourage micro-solutions developed by end-users. Workforce transformation is best achieved by inspiring and empowering our people, and we have worked to embed gamification principles to incentivise our people to join in. A citizen-led approach provides the entire workforce with 'opt-in' opportunities to build new skills, augment existing skills and apply what they've learned in their day-to-day roles.

To foster a culture of innovation and enable employees to activate their digital skills on a daily basis, we've set up what we call a digital lab. This is a crowdsourced online solution-sharing community where our people can find, build and share

digital assets. Staff at all levels and business units contribute digital solutions. Engagement with the hub is incentivised through online games (with monetary rewards at stake), formal recognition and certifications of expertise.

- **Immersive:** Our mobile-based digital fitness app (DFA) helps us create a baseline for digital acumen and provides our people with a common language for relevant new concepts. Through the DFA, employees complete a brief quiz and receive a digital fitness score, which is their personal baseline of digital acumen. Employees then subscribe to a specific digital fitness plan where they can access bite-sized learning content (in podcast, video and text article formats) through their mobile device, with the chance to improve their digital fitness score over time.

Complementing the DFA, a digital accelerator programme enables employees to deepen their skills in digital specialities. A digital trainers programme offers a coaching service to reinforce upskilling in digital topics.

The value of this programme goes beyond upskilling. It is changing our ways of working to embody innovation. As part of this transformation, PwC workspaces around the world have been redesigned to support more open-plan and collaborative work. Our recently launched Experience Centres provide dedicated flexible spaces for engaging in design thinking under our [Business Xperience Technology \(BXT\)](#) method.



FS talent, sector by sector



Digital-first insurance

Though insurance firms have not traditionally been seen as digitally adept, that perception is changing. There is no ‘far future’ of workforce transformation in this sector. The need for new skills is strong now, and it is growing at an accelerating rate.

For example, automation and AI are paving the way for one-click purchases of insurance coverage and [virtually instantaneous claims payment](#). AI, the Internet of Things (IoT) and sophisticated analytics are moving the axis of risk management from anticipating and compensating for losses to preventing problems, detecting possible damage and intervening in risky situations before there is a crisis. The benefits of connectivity and real-time monitoring are already evident in areas ranging from getting health alerts via wearable devices to enabling farmers to boost yields. And transformation is set to broaden as developments accelerate in areas as varied as blockchain, drone surveillance, smart homes and autonomous vehicles.

From a talent perspective, the most immediate priority is recruiting or developing systems specialists who can design, build and maintain elements of these emerging technologies. Data scientists are also in demand. They are needed to enhance predictive analytics involving claims probability, establish customer risk profiles, and underscore underwriting and pricing models. They are working with new forms of data in areas such as consumer lifestyle, as well as with traditional risk information.

As business models evolve, it’s important to create an environment that fosters innovation and helps to inspire and retain people coming in from outside the insurance industry, for instance as part of insurtech partnerships or acquisitions. It is also crucial to make good use of the time freed up by the increasingly automated value chain. For example, as automation takes care of processing routine policy applications and claims, as well as underwriting simple policies, employees can focus more of their attention



on managing complex cases. They can also focus more time on managing the risks associated with trends such as climate change, shifting demographics and urbanisation.

Given that the customer experience in insurance is often digitised, the quality of human interactions with customers has never been more important. This includes the EQ and customer insight that shape the customer experiences that matter most — such as making a claim in the event of illness, death or natural disaster.

Insurers are responding to these opportunities in proactive, practical ways:

- **Changing the role of the claims adjuster:** As more claims-handling processes become automated, a leading property and casualty company is helping adjusters focus more closely on customer service and analytics. To provide the supporting talent infrastructure, the company is in the process of redefining roles, reconstructing job families around future capabilities and

designing more flexible career paths. To attract new talent, company leaders are contemplating how they will offer a digitised employee experience in step with broader digitisation efforts taking place across the claims function.

- **Optimising digital investment:** A leading reinsurer conducted a digital fitness assessment of its workforce to establish a baseline of technological acumen. As part of the same programme, it is enabling employees to acquire the skills needed for the increasingly digitally enabled business. The company seeks to establish its business credentials as a digital innovator and magnet for tech-savvy talent.
- **Equipping the internal audit role to support digitised operations:** An insurance group based in Munich recognised the need for upskilling in the internal audit function to identify, monitor and advise on potential risks within its digitised frontline operations. In addition, both training and new ways

of working were needed to make use of new surveillance and visualisation tools within the core operations of the internal audit function. An initial digital fitness assessment provided the foundations for a digital upskilling strategy, which is now set to draw on a variety of levers, including learning and development, talent management and culture.

- **Navigating the future of work (FoW):** A Fortune 500 life insurer is modernising its ways of working through a dedicated future of work programme. It is also standing up strategic programmes in D&I, decision making, governance and technology innovation. The company seeks to establish a common language for digital concepts in the workforce. Its comprehensive digital strategy includes a digital fitness assessment for employees, an upskilling effort focussed on workforce capability, and a complementary effort to shift mind-sets and behaviours through change management techniques.



Upskilling in banking and capital markets

Banking customers already log on to their smartphones to pay bills, manage their brokerage accounts and track their mortgage payments. And as voice technology emerges as a primary customer interface, opportunities are appearing to bring the bank and broker into everyday lives in new ways.

At the same time, as banks broaden their product mix and vie for a greater share of wallet, they also have access to richer customer data than ever before. If you're a banker, your knowledge of customers goes far beyond their age, income and sociodemographics. You know their spending habits, financial goals and risk profile. With this data comes the ability to micro-segment customer groups, develop

niche products and marketing campaigns, and anticipate your customers' banking needs — sometimes before they do.

These changes present a significant need for upskilling. As banks simplify operations, lower costs, and continue to [acquire financial technology \(fintech\) firms](#) to help them innovate products and digitise the customer experience, shifts in capabilities for both the front and back offices are on the rise. Here's how some banks are responding:

- **Instituting agile ways of working:** A leading investment bank has set up a centre of excellence dedicated to promoting agile methodologies in support of the company's technology implementations. This group is responsible for providing tools and frameworks, as well as structured

learning and real-time coaching to project delivery teams. End-user and customer groups are invited to test prototypes and minimum viable products (MVPs) in order to enhance the design and user experience of project deliverables. These practices also help end-users understand the core functionality of new technologies prior to release. The firm is currently exploring an enterprise-wide change management strategy, with the goal of shifting to a more agile cultural mind-set, for example, by working in a more collaborative and iterative manner, and 'failing fast' instead of succumbing to 'perfection paralysis.'

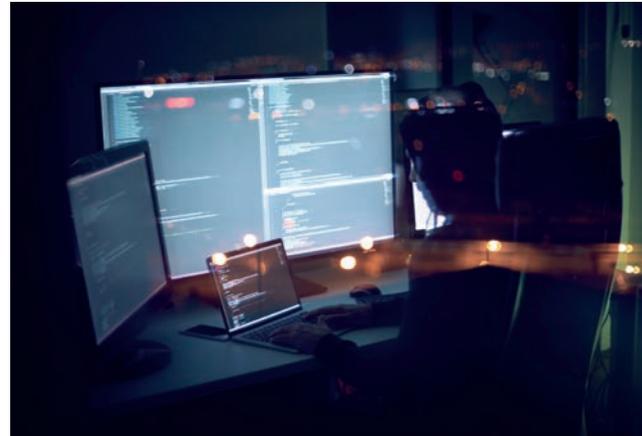
- **Strengthening the technology workforce:** To optimise technology capabilities within the workforce at one leading bank, selected high-potential employees rotate through technology

roles in multiple areas (such as data science and robotics). This helps them establish a broad set of technology capabilities early in their career instead of deep specialities in niche areas. The bank is thus breaking down silos, encouraging collaboration and creating opportunities for more self-directed career planning. Participants in the rotation programme are assigned mentors, and they join a budding community of emerging technologists who are expected to stay in contact well beyond completion of the rotation programme.

At the same bank, hackathons and mobile challenges are commonly deployed to support digital innovation among a broader population of employees. The bank has also invested in a digital learning platform to enable self-service access to digital tools. The tools

can be used for measuring performance and benchmarking talent in real time, collaborating among technology power users and working towards digital qualifications.

- **Launching new enterprises:** A subsidiary of an Asian financial conglomerate set out to target and select talent from the parent organisation to participate in the design and launch of a digital bank. The subsidiary bank carried out a digital fitness assessment to understand levels of digital capability within the selected population (in this case, the incubation team). Leaders then sought to bridge the gap in the on-boarding process with real-time, easily digestible learning content in digital concepts. They created custom learning paths for the incubation team, oriented to continuous learning, and they will use the same approach to test and upskill new hires as the digital bank starts to grow.



74%

of banking and capital markets CEOs say that high performers will distinguish themselves over the next three years through their use of emerging technologies to drive revenue growth.

Keeping pace in asset management

In the asset management sector of the financial-services industry, AI is already taking on some of the most complex market and financial analysis. As developments in areas such as blockchain gather pace, operations in asset management firms are rapidly changing. Client on-boarding and trade settlement could soon become virtually instantaneous. Major firms are making acquisitions in fintech with the expectation that the incoming enterprise will act as a catalyst: raising the skills of their staff, enabling new investment workflows, establishing connections with new data platforms and providers, and gaining tools for data aggregation, analytics, and compliance.

Customer demands and investment patterns are changing just as rapidly. Customers now expect to track all their investments in real time at the click of a button, often with AI-driven guidance. The rise in digital innovation has created

an insatiable appetite for investing in emerging technology companies; most diverse portfolios now include an allocation for technology startups, complemented by dedicated research teams.

The competitive landscape is evolving especially rapidly in Asia. Social media and technology companies are starting FS alliances there. With their combined reach, customer knowledge, capabilities and influence, they can enter the sector with compelling asset management propositions.

Considering all this disruption, there would seem to be an obvious need to upskill within the asset management industry. Yet many firms (particularly small ones) are relatively relaxed. They rely on the entrepreneurial nature of the asset manager, who is constantly looking out for the next investment possibility, to learn about digital trends, products, vendors and opportunity as a basis for making well-informed investment decisions.

This more relaxed approach could be attributed to a variety of factors: the preponderance of relatively small firms, their lean HR functions, their ability to upskill quickly and nimbly, and their lack of interest in preemptive planning for a digital future, as compared with larger banks and insurance companies. According to PwC's 2019 Global CEO Survey, only 62% of asset and wealth management leaders believe that using emerging technologies to drive revenue growth will separate high from average performers three years from now, compared with 74% of banking and capital markets CEOs and 73% of insurance leaders.

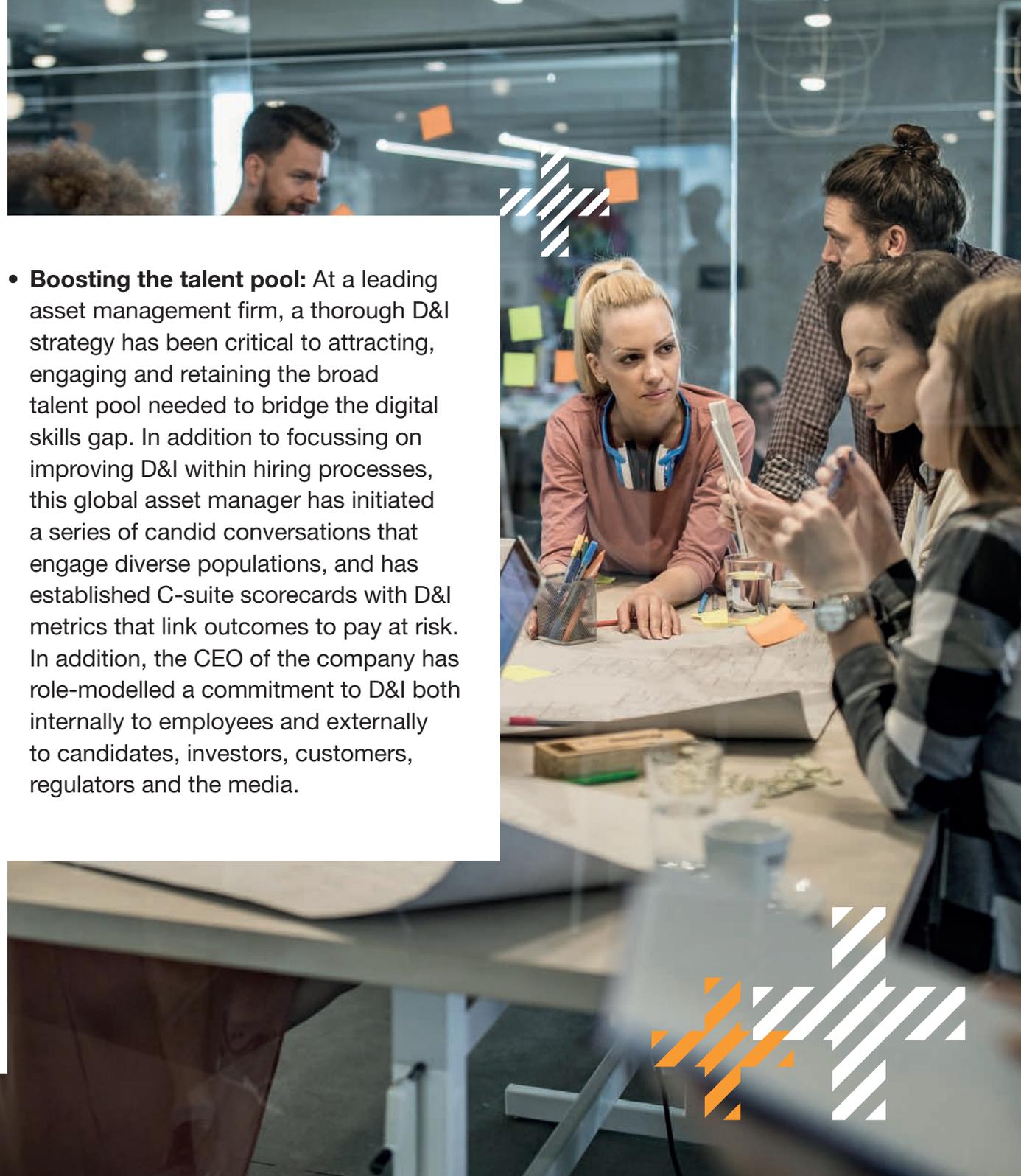
That being said, some larger asset management firms are taking proactive measures:

- **Winning buy-in:** A global brokerage wanted to make a clear and visible shift to digital-centricity. It started with a digital fitness assessment to test the capabilities of a cross-section of leaders in both the front and back offices. To complement this assessment, the firm invested in a

series of deep-dive learning sessions into relevant digital topics such as Industry 4.0, robotic process automation and blockchain.

- **Modernising work:** A global investment management company is encouraging employees to be better, bolder and faster in the way they do business. To enable this change, the company has introduced a new 'ways of working' programme dedicated to building the capabilities needed to serve customers into the future. This includes establishing a digitally fluent workforce in which employees understand technology tools, speak a common digital language, and are confident in adopting new tools to advance their career. To support the programme, the company is constructing a learning strategy that coordinates all educational activities as part of an integrated hub, promoting a culture of self-directed and gamified learning.

- **Boosting the talent pool:** At a leading asset management firm, a thorough D&I strategy has been critical to attracting, engaging and retaining the broad talent pool needed to bridge the digital skills gap. In addition to focussing on improving D&I within hiring processes, this global asset manager has initiated a series of candid conversations that engage diverse populations, and has established C-suite scorecards with D&I metrics that link outcomes to pay at risk. In addition, the CEO of the company has role-modelled a commitment to D&I both internally to employees and externally to candidates, investors, customers, regulators and the media.



The global landscape

Asia-Pacific: A wide range of activity

The Asia-Pacific region provides fertile ground for digital innovation, because many of these markets are not held back by the deadweight of technological legacy. [Reports](#) project that the Southeast Asian Internet economy will hit almost US\$177bn by 2025, exceeding earlier forecasts. And in recent years, the region has attracted nearly US\$18bn in funding, with more than half going to startup ‘unicorns.’

A critical enabler for this growth has been the 100,000 skilled workers currently employed in the region, a number that is growing by 10% each year. But despite this growth, the region is not immune to the talent shortages faced elsewhere around the globe. One factor in many Asia-Pacific economies is the role of government: partnerships between states and private enterprise are heavily shaping the digital workforce and upskilling strategies commonly seen in the region.

For example, **Singapore** is relying on government intervention to build a pipeline of strong talent through its education system. Schools, universities, policy makers and business groups have come together to create ‘transformation maps’ for more than 20 industries, including FS. These maps project what each industry will look like in ten years’ time as well as what critical skill sets will be required. Within FS, the programme has identified the need for a professional conversion programme to help bank tellers move into new roles working with machine learning and the IoT. The government is also working with educators to create more adaptable curricula and teaching methods to promote lifelong learning and skills development for all residents.

Japan, as noted earlier, faces a great need for digital upskilling, underscored by the necessity of safeguarding the jobs of workers on lifetime contracts. Digital innovation is taking place, but wholesale elimination of jobs as a result of automation is less likely in Japan, given this social contract.

However, three macro issues make the discussion concerning digital innovation and upskilling especially challenging in Japan:

- **The aging workforce:** As of May 2019, more than 27% of the Japanese population is more than 65 years old. Birth rates are well below the replacement level, and life expectancy is continuing to rise. According to a [recent study by Chuo University](#), the country will face a shortage of 6.44m people in the labour force by 2030. To address demographic challenges, more automation is required, which is likely to generate new demand for digital acumen. Upskilling strategies in Japan are thus likely to focus on employability and lifelong learning for an aging workforce, taking into account statistics on the country's long life expectancy.
- **Gender parity:** To relieve its talent shortage, Japan seeks to increase female participation in the workforce. The country ranked 110 out of 149 countries in the World Economic Forum's

2018 [Global Gender Gap Report](#); its national 'womenomics' effort is intended to change this aspect of the Japanese workforce. To attract and retain female talent, firms will need to consider important D&I elements such as family-friendly employment policies, flexible work and pay equality as critical components of the digital workforce strategy.

- **The industry structure:** Given the prevalence of small businesses that do not provide the rigorous learning infrastructure seen in large FS firms, governments and small businesses are likely to partner with one another to mobilise and fund upskilling initiatives. These partnerships will provide Japanese workers with access to relevant learning opportunities. Given this dynamic, the burden of digital upskilling falls less heavily on commercial enterprise and more heavily on the shoulders of government.

In **Australia**, as the FS industry responds to high-profile public inquiries such as the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry, firms are under heightened pressure to restore trust. This means providing improved products, services and culture to Australian consumers, as well as providing access to more helpful information and resources under the Australian Banking Association's Better Banking reform package.

These measures necessitate a variety of new digital skills and workforce demands:

- Enhanced digital fluency to engage the New Payments Platform (NPP) for facilitating real-time payments between some Australian bank accounts as well as bank switching
- Enhanced communication skills to offer greater levels of transparency in product fees

- Enhanced innovation skills to create new services for customers in need (for example, the ill and unemployed, along with victims of domestic violence or natural disaster).

Whereas digital upskilling is central to innovation in the Australian FS market, the digital revolution has been less quick to accelerate than expected. Most major banks have considered launching new digital bank brands, but many efforts have failed. They get lost in layers of bureaucracy, management changes and restrictions on new investment.

But despite the above, upskilling in the EQ realm (relationship building, communication, innovation and creativity) is of critical importance in Australia, given the scrutiny banks are facing. Finally, as the digital banking market expands on a global scale, and as Australian banks continue to consider the viability of stand-alone digital brands, the focus on building more technical digital capability in addition to core skills is expected to intensify.

Throughout the region, interest in upskilling and workforce transformation is growing. A number of FS enterprises are seeking guidance from more experienced firms, and even shadowing those firms' HR departments to become more self-sufficient in their talent strategies.

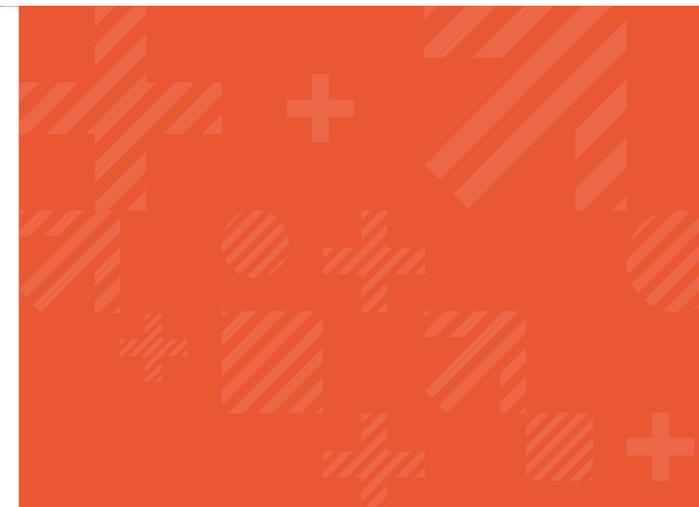
North America: Combining the digital and the personal

Financial-services organisations in North America recognise the need to cultivate a digitally savvy workforce to compete. Their goals include lowering costs, streamlining operations, complying with regulations, and optimising customer and employee experience. To meet these goals, they are focussed on upskilling the existing workforce through formal programmes intended to build baseline digital capability. Examples include the creation of centres of excellence in agile methodologies; digital learning programmes, including the use of 'snackable' learning content; and coaching programmes and reverse mentoring — which pairs older workers with savvy digital natives — on digital topics.

In addition to building the digital workforce from within, many firms are exploring new approaches to recruiting and workforce augmentation:

- **Using contingent labour to fill short-term needs:** Some consulting firms, including PwC, are investing in the digital and data capabilities of their people so that they can be deployed for clients who need a short-term supply of digital labour. The freelance economy for these kinds of skills-on-loan in the US is growing at a rapid pace: according to one recent study, almost [one-third of US workers are doing freelance work](#), which represents an increase of more than 50m over five years.
- **Placing more emphasis on D&I in hiring to attract atypical candidates:** This focus on diversity became especially pronounced in the US banking sector after the topic was raised in D&I hearings by the House of Representatives Committee on Financial Services in February 2019. This spotlight is forcing major US banks to demonstrate greater commitment to D&I.





Many FS CEOs in the US are members of [CEO Action for Diversity & Inclusion](#), the largest coalition of business leaders in the US committed to driving social change. When the group's pledge is implemented, it results in greater access to diverse talent; the final outcome is better innovation capabilities that support the digital agenda (and other agendas).

- **Mobilising programmes dedicated to the workforce of the future:** Some firms in the US FS sector are standing up future of work (FoW) programmes to anticipate and manage the digital upskilling agenda — identifying what the

critical skills of the future are likely to look like (including those that are digital). As part of this effort, some are contemplating how to establish this long-term capability within the HR function by considering where this work will be deployed in the context of the HR operating model. Some have considered centres of excellence that are dedicated to supporting these efforts across the enterprise. Most are embedding their FoW efforts in their existing HR activity. For example, within any given HR capability (such as learning and development, recruitment or compensation), they are formalising the

expectation that work will be conducted with an eye towards the future (as opposed to assigning this kind of work to a designated function). Separately, some FS firms in North America are forming coalitions and partnerships with governments, industry groups and academic institutions to enhance the domestic supply of digital labour.

CEOs in the North American FS sector, like their counterparts around the world, consider the shortage of critical skills a leading threat to growth. But the North American market has one distinctive element in its favour: the widespread

availability of mature digital talent. Talented managers and digital experts, who are scarce around the world, flock to vibrant hubs such as Silicon Valley, Seattle, Austin and New York. The startup and innovation-friendly environment enabled by plentiful angel and venture capital firms in the US contributes to this migration of digital talent from other markets. If immigration restrictions do not impede it, this trajectory is likely to continue. The challenge for FS firms will be obtaining a piece of the pie through purpose, culture and compensation.

Europe: Navigating disparate talent challenges

Given Europe's strong technical education systems, especially in **Central and Eastern Europe (CEE)**, employees with the digital skills prized for the future are available to the FS industry. However, companies in the CEE are challenged with retaining those skilled individuals, who are often tempted by the mature markets in cities such as London, Zurich and Frankfurt. To persuade talented people to remain in the CEE, FS firms in this region must do even more to enhance the employee experience and offer a differentiated employer brand. Some Romanian companies, for example, have rolled out digital tools and collaborative learning and development programmes, and thus are more likely to convince top talent to stay on home shores. One such company, leading AI firm UiPath, although global, accommodates a significant portion of its workforce in **Romania**, the CEO's home country.

Western Europe faces some of the same pressures, along with a growing mistrust of automation. In **Luxembourg**, the government has pioneered a proactive response to this mistrust. As mentioned above, the country has established the Digital Skills Bridge, a system for working with employees whose jobs will be impacted by automation to match them with jobs and training based on their current skills and potential for gaining new, more applicable skills. The country has found that this programme strengthens employee motivation and increases ROI on digital training across the board.

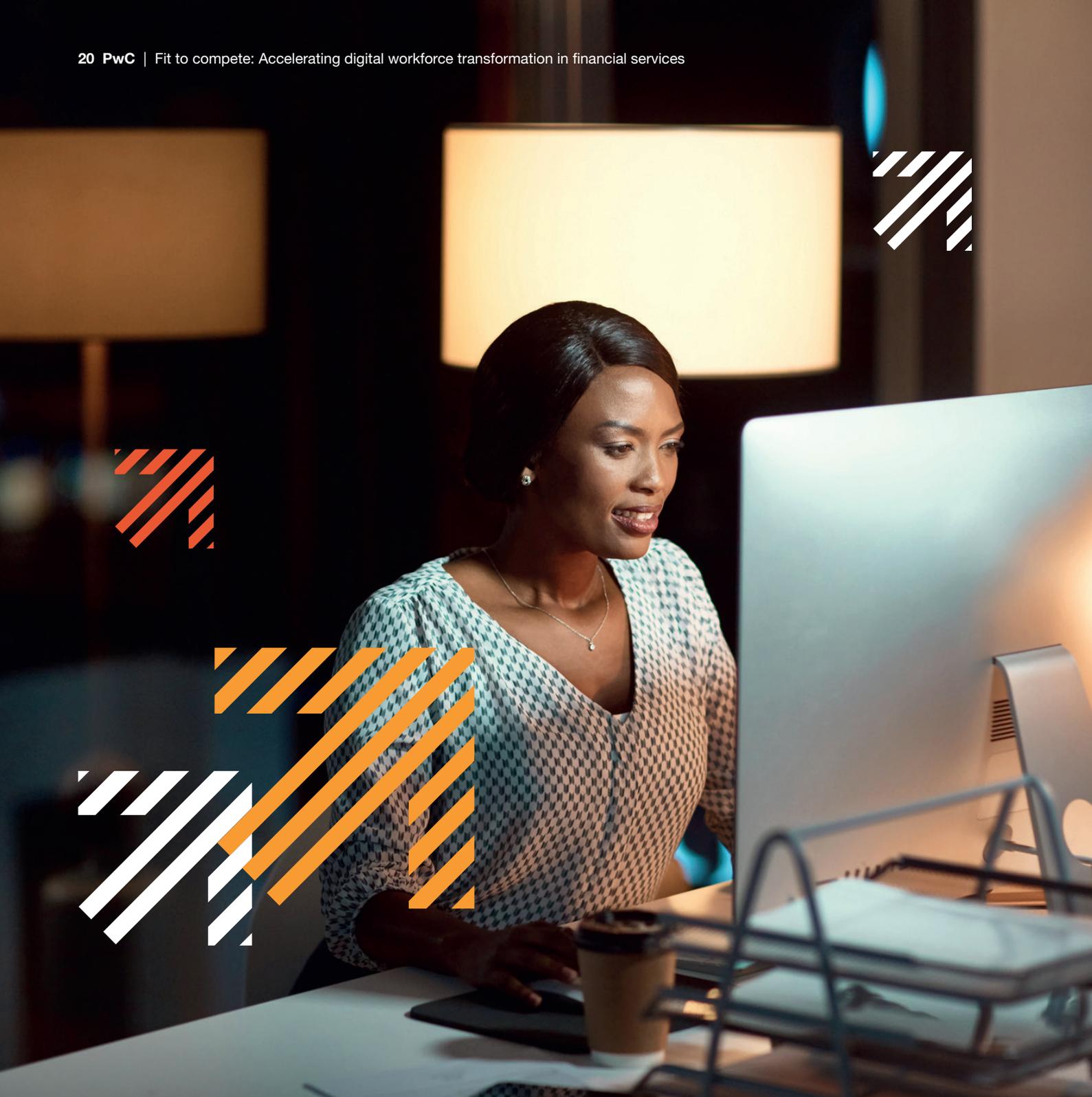
Meanwhile, with venture capital and private equity investment on the rise in the UK fintech sector, London is establishing itself as a [fintech hub](#). The **United Kingdom** now ranks third globally in venture capital invested in fintech, behind China and the US. With the border open at present, top digital specialists across the **European Union** can make their way to London to

take advantage of this vibrant community. However, Brexit and other geopolitical factors are likely to affect the access to talent for FS firms in the UK. This will form a key consideration in the digital workforce strategies built by FS leaders in this market.

Across the European Union more broadly, the General Data Protection Regulation (GDPR) measures have changed the talent equation for FS firms. These firms now need to build and maintain critical data privacy skills, which will continue to be core to success in a post-GDPR world and a critical focus area for digital upskilling strategies.



Across the European Union, GDPR has changed the talent equation for FS firms. These firms now need to build and maintain critical data privacy skills.



Gauging return on investment

As with any other transformation on this scale, preparing your workforce for a digital-first future takes considerable time and money. That's why ensuring ROI is critical — buy-in from the leadership and engagement within the workforce will quickly fall away if there is no clear evidence of benefits.

Exhibit 2 shows a sample scorecard for a hypothetical bank, tracking the benefits of digital upskilling over time. The basic categories are derived directly from the prioritised outcomes shown in Exhibit 1; the illustrative measures represent some of the metrics and indicators that the bank might choose to track. The trend arrows are also illustrative, representing the outcomes that might be seen after a few quarters of tracking results this way.

Exhibit 2: Scorecard template for a hypothetical bank's upskilling initiative

↑ Trending up
 → Trending even
 ↓ Trending down

Financial		
Success metric	Illustrative measures	Trend
Profitability	Return on equity, margin, efficiency ratio, client profitability	↑
Cost savings	External cost commitments (for example: savings committed to external stakeholders such as investors, industry analysts and regulators); internal cost commitments (reduction in budget spends, cost management)	→
Return on investment – Technology and tools – Upskilling program	Realisation of business case benefits	↑
Productivity	Cycle times, sales volumes, transaction processing, reinvestment of productivity savings	→

External stakeholders		
Success metric	Illustrative measures	Trend
Customer experience	Net Promoter Score, feedback, complaints, multichannel effectiveness, acquisition measures	↑
Digital brand	Metrics related to attracting external digital talent, thought leadership (conferences, research, task force participation), external awards and recognition	↑
Trust	Feedback from customers, regulators, and community constituents; risk and quality metrics; progress against 'remediation' programmes	→

People		
Success metric	Illustrative measures	Trend
Training effectiveness	Metrics related to skills and knowledge building (including enterprise-wide, functional and job-specific skills), employee learning experience surveys (covering course design, tools, environment, accessibility), instruction quality metrics	↑
Adoption	Metrics for tool utilisation (access, transactions, downloads, speed, responsiveness), user experience (usability, errors, elimination of workarounds), end-to-end design (process improvements, role clarity, policy adoption), and knowledge sharing (peer-to-peer learning, learning communities, post-implementation support)	↑
Core and digital skill building	Metrics related to skills and knowledge building, behaviour and mind-set change, and reductions in the skills gap (for example, savings in external hire and contractor spending)	→
Innovation	Metrics related to digital ideation (automation, visualisation tools, robotics, and ways of working), including launch and scaling measures	↓



Metrics such as these, embedded in leadership scorecards, can help ensure that senior executives are accountable for these results. They can be taken further in some cases to affect variable pay. To make these metrics meaningful, transparent reporting and communication are important. Keep an eye on the story behind the numbers, the broader strategic context. In the early years of digital workforce transformation, development costs will be high. The ROI might not be as compelling as it will be in later years. Managing these expectations with key stakeholders is an important part of the process.

At PwC, our global leadership teams are closely involved in reviewing the balanced scorecard for digital fitness, and results are reflected in their performance-related pay. This includes quarterly reviews by the executive operating board to track progress against milestones. Funds are not released for the next quarter until milestones are met for the current quarter.



Workforce transformation in FS

Putting a digital workforce into place is as much a matter of winning hearts and minds as it is of strengthening specific skills. As we've shown in this report, digitisation is ushering in a new kind of FS organisation and the workforce demands that come along with it. The new FS professional combines agility and digital fluency with core skills, along with a readiness to embrace the future.

Where does the transformation begin? All organisations have different starting points, market demands and strategic aspirations. Yet six foundational steps are common to every effort. These don't focus just on learning and development, but also on winning workforce buy-in on a sustainable basis by creating opportunities to apply new skills and drive innovation.

1. Determine clear digital workforce goals

Explicitly articulate the business benefits you expect to achieve through your digital upskilling investments. For many firms, the primary goal is to optimise the value of these investments by equipping the workforce with the skills needed to effectively engage with and apply digital tools.

In addition, some firms are motivated by other goals:

- Fulfilling organisational objectives
- Cultivating diversity and inclusion
- Transforming ways of working
- Offering a digital talent experience and enhancing the employer's brand
- Driving down cost
- Increasing regulatory compliance
- Generating new ideas and innovation

Understanding the endgame is your first priority, because it will determine how you channel and focus your investments.

2. Tell a powerful story about the value of digital upskilling

The narrative about the purpose and efforts of your transformation is critical to its success. Employees need to feel that they are part of the journey. The story needs to be communicated in a way that reaches people throughout the organisation and gives them a chance to take it to heart. Organisations can accomplish this by:

- Articulating the upskilling strategy, the case for change and the road ahead to all stakeholders
- Leveraging a variety of internal channels to deliver communications (newsletters, announcements, communications from the CEO, websites, events, etc.), continuously embedding the narrative within all of them
- Engaging organisational leadership to reinforce the message and cascade the story and vision down through the enterprise
- Standing up a digital champion network. (Digital champions, also known as ‘digital accelerators’ or ‘authentic informal leaders,’ are people from within the ranks who can help model new behaviours, support communication efforts and provide feedback on employee perceptions and sentiment.)

All levels of the organisation should understand the vision and the benefits of digital transformation. When employees fully grasp ‘what’s in it for me,’ an organisation can better establish a culture of digital curiosity, self-learning and innovation.

3. Choose a focussed launch point

Most firms select a limited segment of the workforce to pilot digital upskilling initiatives. This agile approach is wise, as it allows for the dynamic revision of the digital workforce strategy over time. Where should you start? Here are some common candidates:

- Leadership teams (CEOs and executives)
- Functions or regions with urgent needs (e.g., where automation is planned or in flight)
- Pockets of enthusiasm and key influencers (e.g., adaptable populations, agents for change, visionaries).

Consider assembling a pilot group that reflects appropriate levels of diversity across the organisation in terms of, for example, gender, age, tenure, seniority, skill set and location. Additionally, consider alternative models to segment stakeholders beyond seniority, demographics or other common behaviours and traits. Creative ways to group employees include horizontal teams and personas (fictional descriptions used to create better employee experiences).

4. Connect the programme with the rest of the organisation

The digital upskilling programme should not exist in a silo. It is critical, in other words, to connect the effort with existing learning and development and talent programmes across the organisation. Your upskilling effort is not a panacea; it must be closely involved with how you reward and recognise people, how you manage their performance, how you mobilise people on agile programmes, how you on-board people, and how you move employees to new positions in an organisation. Alignment with, say, your recruiting

functions, ways of approaching projects and internal mobility programmes will further reinforce the organisational commitment to digital transformation and help drive employee participation.

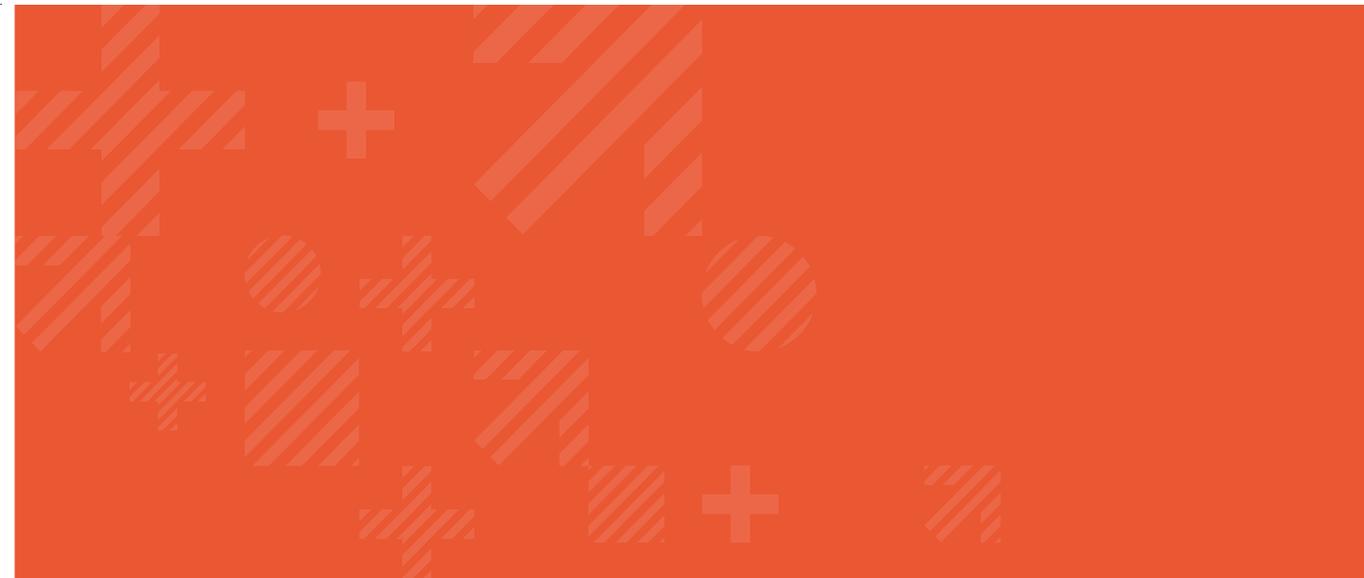
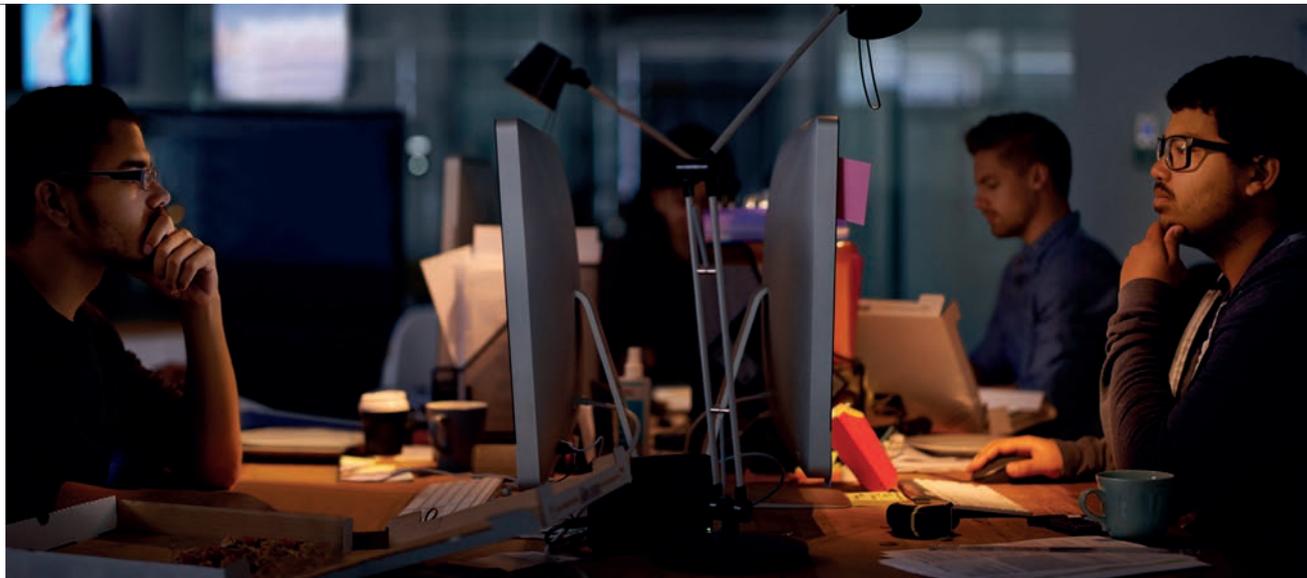
5. Prepare for headwinds

Launching a successful programme can prove challenging, and obstacles will inevitably arise. Look in advance at the concerns people may have, and at other possible unintended consequences of your efforts. Put in place thoughtful contingency plans so that you can deal with these 'side effects' and challenges in a timely way when necessary. For example:

- People may express fear and anxiety about job loss and general change, to a point that holds back the initiative. If you have told a coherent story in your digital upskilling

communications, you may be prepared for this. Position your initiative as an investment that the firm is making in its people and their future. Then, when fear and anxiety are voiced, you can remind people of the ways you're watching out for them.

- Employees may lack the time to take advantage of digital upskilling opportunities (and may burn out or resent giving up evening or weekend time for them). Address this possibility in advance by looking for ways to improve productivity and thus create extra capacity and time during the workweek. Provide self-paced digital options that employees can use during the workday — for example, by establishing an environment where learning about digital is omnipresent, available in brief 'snackable' portions and accessible on demand. Also consider gamification techniques to attract the attention of the workforce and make digital upskilling fun.



- Some workforce populations, such as older employees, may feel alienated or redundant. The proactive solution starts with your own attitudes. Never assume that older workers will resist upskilling; older generations often embrace change programmes more readily than younger generations. Design an inclusive digital workforce strategy, in which all employees are given equivalent access to digital upskilling opportunities. And customise upskilling programmes to offer immersive support to the populations most in need — which is not necessarily the people asking for help. Reverse mentoring programmes, in which younger employees coach older employees, have proven effective at helping with digital concepts.
- Digital workforce strategies may be too focussed on upskilling the captive workforce, and might not involve enough people. Consider using levers within the digital workforce strategy that attract new talent. Levers include contingent labour programmes, industry talent swaps, community partnerships, targeted sourcing efforts and a stronger D&I strategy.
- Speaking openly about digital upskilling may create discomfort in local communities, especially when you candidly discuss the impact of automation on jobs. Develop your community messages in advance, highlighting how the firm's upskilling approach demonstrates investment in the workforce and the community. Look in advance for people who are likely to have success stories, which could then be highlighted as an example of the programme's value. Consider partnering with other local entities (such as community colleges) to demonstrate how digital innovation can be an opportunity for — as opposed to a threat to — the prosperity of local communities.



6. Measure your progress and drive towards sustainable results

Particularly in organisations that have experienced change fatigue, there is a risk that employees will perceive digital upskilling as a fad that will soon pass. To mitigate this possibility, the digital workforce strategy must extend far beyond learning and development techniques, and influence culture and ways of working. Put simply, digital curiosity must become part of the firm's DNA.

Techniques for achieving this include:

Strategy

- Lead digital upskilling from the business but enable it through support functions (such as HR).
- Establish a long-term digital workforce strategy with interim milestones and success measures (and communicate progress early and often).
- Demonstrate business-led innovation by investing in infrastructure that helps employees innovate daily (digital platforms, collaboration hubs, flexible work).
- Review and refine operating and interaction models, policies, procedures and other organisational attributes that impede innovation. Institutionally, establish a fertile environment for innovation, not a hostile one.

Execution

- Link digital curiosity to critical business imperatives to help employees understand the urgency and the upside of digital upskilling.

- Integrate digital curiosity in the firm's corporate values and reinforce it in internal and external branding.
- Gamify and recognise innovative behaviours to make innovation fun and motivating (for example, offer cash rewards for innovation projects, run innovation jams and hackathons, celebrate success stories with public recognition).
- Define digital behaviours and embed them across talent programmes (in hiring, performance management, promotion).
- Engage with industry groups and coalitions to accelerate the digital and upskilling agenda (for example, in community colleges and with local vendors).

As a leader in a financial-services firm, your first priority should be your workforce. Having people with digital acumen throughout your enterprise has never been so important — or so difficult. These six foundational steps — determine goals, tell a powerful story, choose a focussed launch point, connect the programme with the organisation, prepare for headwinds and measure your progress — will give you a head start on your competitors.

It might take months to see results, even if you move quickly. And there is reason to move quickly. The time for organisational workforce transformation is now. The industry will continue to digitise — to meet productivity goals, to provide customers with an engaging experience and to stay relevant in the face of upstart competition. The problem will not go away. If you can address it proactively, you'll do well for your customers, employees and shareholders. Moreover, by learning to raise the skills and hone the judgment of your employees, you'll stand among the leaders of the FS industry, positioned to take the lead in mastering the successive waves of change that will reach you in the future.

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