

Vietnam Digital Readiness Report

PwC Vietnam's survey on technology,
jobs and skills

March 2021



Foreword

Our world today is facing a skills crisis. In recent years, we have seen technology develop at breakneck speed, resulting in a shortage of qualified talent for jobs created by the new digital economy.

The rise of automation is also changing the way current tasks are carried out, and putting jobs in various industries at risk. Together, these two trends have broadened the skills gap between today's employees and the workforce of the future.

The COVID-19 pandemic has accelerated changes in how and where we work. While the future is unpredictable, it is worthwhile to look ahead now to prepare for a changed future. Because resilient futures depend on technology adoption and new skills.

Do Vietnamese people feel they are equipped with the relevant skills needed to help them work alongside technology? We sought to find out through a survey that was released to the Vietnamese public from 12 November 2020 to 27 December 2020. Our survey brought in a total of 1146 responses. The key findings as voiced by our respondents are reflected here.

This report explores how ready Vietnamese people see themselves in the age of technology.

Dinh Thi Quynh Van

General Director

PwC Vietnam



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Background

Digital readiness

Digital readiness is defined by the level of human capital development that is needed to build a workforce capable of utilising and creating technology on a continuous basis¹.

¹ Cisco Global Digital Readiness Index 2019

Vietnam's digital readiness journey

While Vietnam has made important progress in 2020, more work needs to be done to address the digital skills development gap. This is to ensure that in pursuit of the nation's digital economy achievements, no one will be left behind.

According to the 2020 Global Innovation Index (GII), Vietnam maintained its 42nd position for the second year in a row. While the overall ranking remained the same, compared with 2019, GIi also observed that Vietnam improved in business sophistication (rank 39th) but declined in human capital and research (rank 79th), and knowledge and technology outputs (rank 37th).

| Ranking in 2020 | Country comparison in South East Asia | | | | | | |
|--|---------------------------------------|------|------|------|------|------|--------------|
| | SG | MY | TH | ID | PH | VN | VN (2019) |
| GII ² (out of 131 countries) | 8th | 33rd | 44th | 85th | 50th | 42nd | 42nd |
| GTCI ³ (out of 132 countries) | 3rd | 26th | 67th | 65th | 46th | 96th | 92nd |

Although Vietnam has emphasised a focus on Industry 4.0 policy reforms, in terms of workforce digital skills, the nation dropped four spots to rank 96th in the 2020 Global Talent Competitiveness Index (GTCI)

² Global Innovation Index (GII) 2020

³ Global Talent Competitiveness Index (GTCI) 2020

Vietnam's digital readiness journey (cont'd)

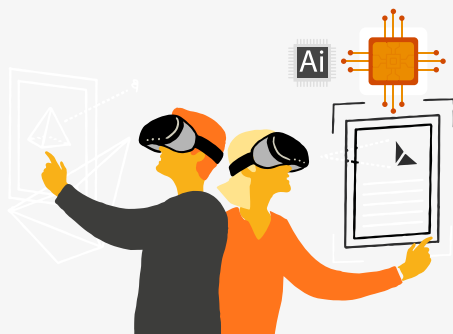
What does the disparate takeaway mean?

There is no “one-size-fits-all” approach. The skills and competency of the workforce requires constant improvement as the country forges ahead into the new digital world. Adding to this upskilling or reskilling complexity is the fact that different skills (Advanced technical skills, “soft skills” or generalised computer literacy) are needed on multiple levels in order to account for individuals in various life stages.

A lack of clarity among the workforce about the skills required to succeed can also delay the nation's digital integration with Industry 4.0. According to an earlier PwC report⁴, only 14% of the respondents believed that they and their employees had a clear view of the skills required for digital transformation.

84%

of Vietnamese respondents indicated a need for a skills framework to guide Industry 4.0 capability development⁴



⁴ PwC Vietnam - Industry 4.0 Vietnam Survey 2018

Vietnam has significant opportunities to further accelerate digital readiness

Vietnam has made great strides in pushing the Industry 4.0 agenda forward. Amid the disruptive changes to technology, how the nation prepares its workforce now to prevent them from being left behind is crucial.

Below are some key 2019-2020 initiatives proposed to push forward the digital transformation agenda in the country:

- **Resolution No. 52-NQ/TW**, published in 2019 sets out guidelines and policies in Vietnam's pursuit of and participation in the Fourth Industrial Revolution
- **National E-government portal** to centralise and streamline public facing services was rolled out in late 2019
- Ministry of Information and Communication - **National Programme for digital transformation** by 2025 targeting sectors such as agriculture, education, finance and logistics
- Ministry of Science and Technology and Ministry of Education and Training - **National Programme 844 and 1665** to help the development of digital and technological startups
- **Decision No. 127 / QD-TTg** of the Prime Minister: Promulgating the National Strategy on Artificial Intelligence Research, Development and Application by 2030
- Ministry of Planning and Investment - **Proposed National Strategy for the Fourth Industrial Revolution** draft⁵



⁵ Vietnam Investment Review - A Vietnamese perspective on the evolution of Industry 4.0, June 2020



Making the most of Vietnam's digital agenda

Despite the ongoing health and economic challenges, COVID-19 also drove the adoption of multiple digital initiatives. Now is the time to accelerate Vietnam's digital and technology transformation agenda.

Vietnam's on-going regulatory focus on digital transformation has helped the nation navigate this health crisis through its timely and evidence-based response. At its peak, local authorities used different digital tools (text messages, websites, social media) to send alert notifications. This action not only raised public awareness about the pandemic, but also resulted in a significant rise in online public services.

What is clear is that the COVID-19 pandemic has caused a permanent and significant adoption spurt in Vietnam. To illustrate, The National E-government portal, which was rolled out in late 2019, saw a surge

in traffic in 2020⁶, with 11 million visits in late January and over 28 million at the end of March, during the height of COVID-19 outbreak in Vietnam. In addition, Vietnam's Internet economy is the fastest growing in SEA in 2020 and will have an estimated value of US\$ 52 billion by 2025⁷.

In order to achieve the nation's goal to become a high-income economy in the future, Vietnam should hasten the country's digital and technology transformation agenda. The World Bank, in its recent COVID-19 policy response report⁸ noted that there is an opportunity to expand Vietnam's digital agenda by encouraging priority reforms to promote e-learning, e-payments, and e-governments. And we agree with this.

⁶ World Bank - Can COVID-19 catalyze Vietnam's digital transformation?, April 2020

⁷ e-Economy SEA 2020 Report

⁸ World Bank - COVID-19 Policy Response Notes for Vietnam, June 2020



Key findings

Summary of our findings

What do Vietnamese people think about technology?

The Sentiment

Amid optimism lie concerns around job security - While 89% of respondents believe automation brings more opportunities than risks, 45% also expressed concerns about automation putting jobs at risk.



How will technology change work?

The Impact

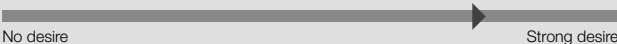
There is general agreement that technology is changing jobs - 90% believe that technology will change their current jobs in the medium term (6-10 years), while 83% believe they will feel the impact in the short term (3-5 years).



What will Vietnamese people do in response to the digital transformation?

The Response

The desire to be digitally savvy is strong - 84% of respondents say that they would learn new skills now or completely retrain in order to improve future employability.



How should Vietnamese people be supported?

The Support

Because digital skills are key to improving job prospects, 55% said it is the responsibility of individuals to reskill. However, **businesses and governments can play important roles in addressing the upskilling gap.**



The sentiment

What do Vietnamese people think about technology?

Our survey findings reflect an accelerated presence and influence of technology in the workplace and the changes to come. Enabling both workers and firms to adapt in the new technological environment and empower them to achieve outcomes will be key.

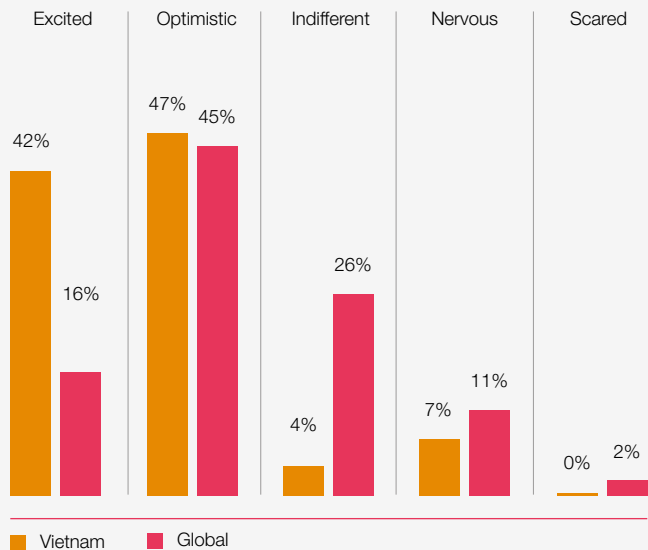
Grant Dennis
Chairman, PwC Vietnam

1 Technology offers more opportunities than risks: Vietnamese people are more optimistic than their global counterparts

This finding comes as no surprise 85% of respondents said that it presents more opportunities than risks. This level of optimism is higher than the global average of 50%. A key feature of automation, for example, is its ability to perform manual and routine tasks automatically. This, in turn, frees up time for employees to focus their attention on more interesting challenges.

89% of respondents said that they had positive feelings about the role of technology in their jobs. Globally, a majority (61%) were positive about the impact of technology.

Q: When you think about the future impact of technology on your job, which of the following best describes how you feel?

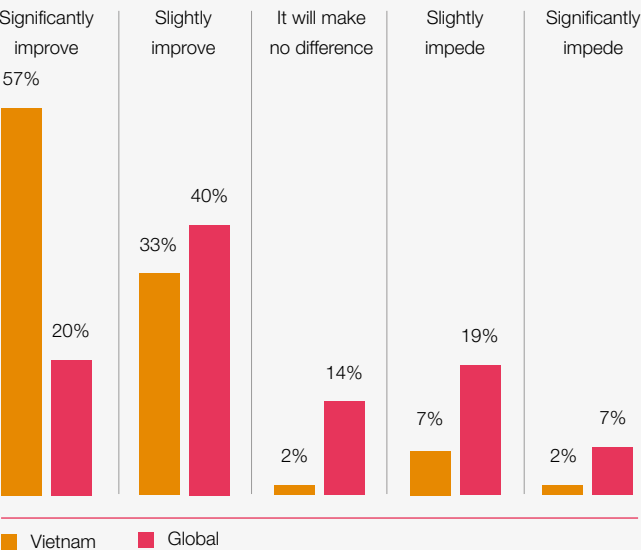


2 Vietnamese people believe that technology will benefit their future careers

The level of confidence highlights the importance of digital skills as workers who are equipped with the right skills will be able to effectively make the most out of the current and future technological advances. This finding confirms what we have long known to be true: digital skills are key. To prepare Vietnamese people for the digital future, the government recently issued the National Plan for Digital Transformation by 2025 which highlighted tasks⁹ needed to further strengthen Vietnam's workforce.

90% of our respondents overwhelmingly think that technological developments will improve their job prospects in the future. This level of optimism is higher than the global level (60%).

Q: Do you think that technological developments will improve or impede your job prospects in the future?



⁹ National digital transformation program to 2025, orientation to 2030

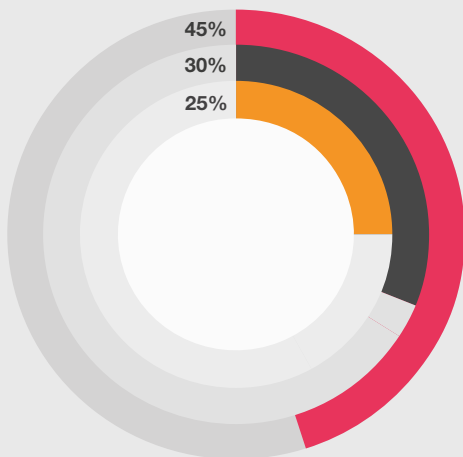
3 Despite the optimism, there are concerns around job security

Underlying our local respondents' positive sentiments is a sense of uncertainty. Many are still concerned about how automation will affect job security.

According to an earlier PwC study¹⁰ analysing the potential long-term impact of automation globally, the proportion of existing jobs that might be at high risk of automation will differ based on three factors:

- Industry sectors;
- Occupations within those industries;
- Workers of different ages, gender and education levels

Q: How much do you agree or disagree with the following statement: “I am worried that automation is putting jobs at risk.”




45% of respondents are worried that automation will put jobs at risk.



¹⁰ PwC - How will automation impact jobs?, 2018

The impact

How will technology change work?



Digital disruption is already happening - there is prediction that by 2025, half of all work tasks will be handled by machines

Vo Tan Long

Chief Digital Officer, PwC Vietnam

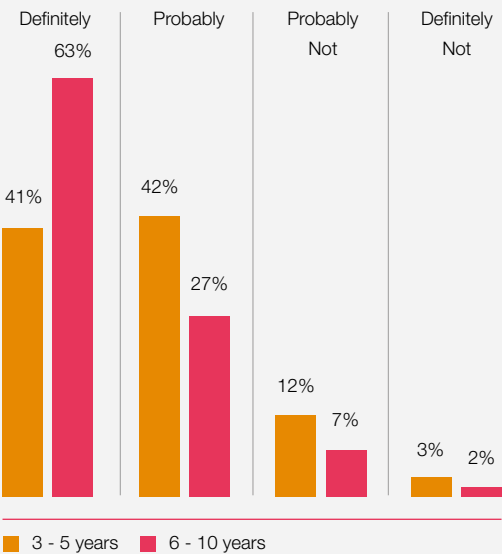
1 Undoubtedly, technology is changing the job landscape in the next 6-10 years

Globally, PwC's own analysis¹⁰ predicts that 30% of jobs are at risk of automation by the mid-2030s. This reflects the potential impact that automation and new technologies will bring and the need to meet the coming requirements of the new jobs and opportunities.

90% respondents agreed that their jobs will change in the next 6-10 years

While 83% believed that it will happen sooner i.e. in 3-5 years

Q: Do you think technology will change your current job?

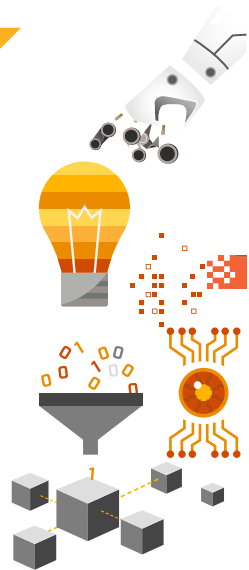


¹⁰ PwC - How will automation impact jobs?, 2018

The impact: How will technology change work?

2 Jobs themselves will be different from today

While our local respondents believe new technology and automation will change the job landscape, the extent of the change will differ.

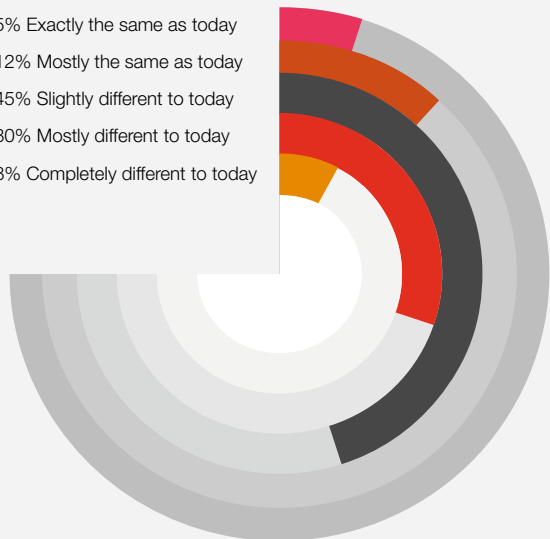


45% believed that technology will make some slight improvements but no significant changes.

38% said the job will be very different (i.e. many parts of the job will be done automatically or the job might not exist in 10 years' time)

Q: “Thinking about somebody doing the job you have now but in 10 years’ time, how do you think it will change?”

- 5% Exactly the same as today
- 12% Mostly the same as today
- 45% Slightly different to today
- 30% Mostly different to today
- 8% Completely different to today

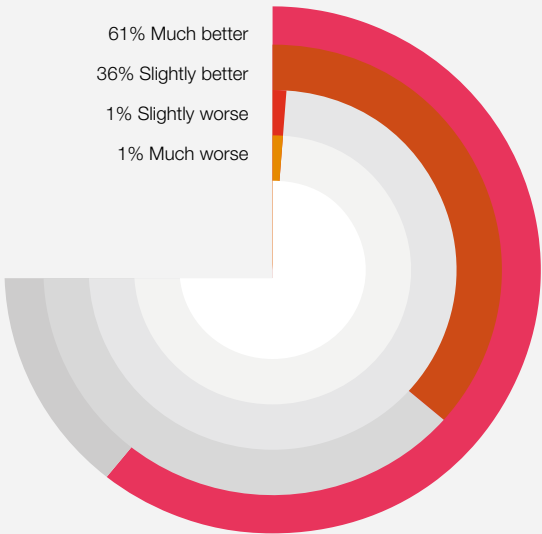


3 Technology will improve productivity

Top reasons for this optimism are:

- Technology will allow me to do more interesting work (35%)
- Technology will enable me to get more work done (25%)
- Technology will find solutions to problems (20%)

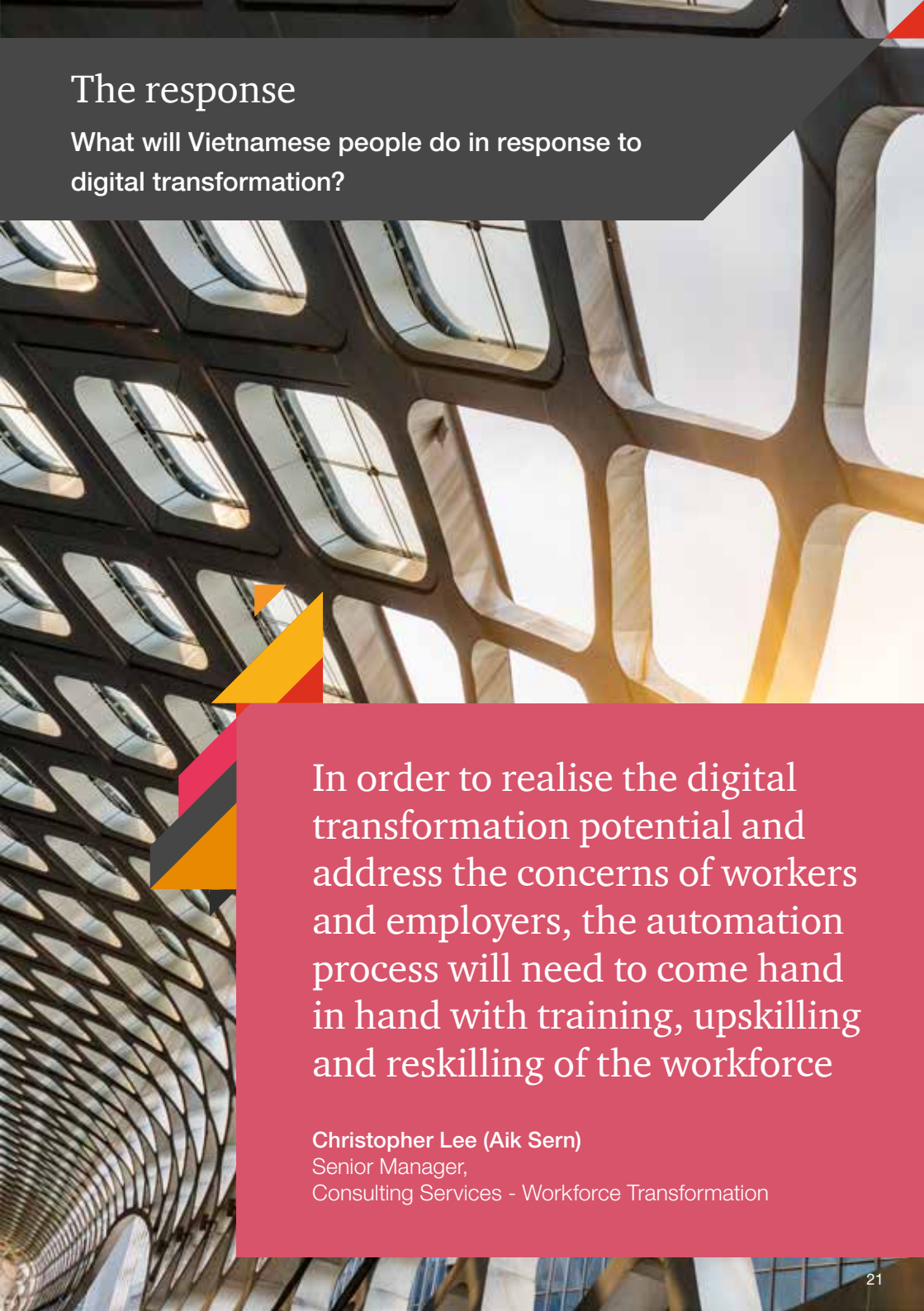
Q: Do you think technology will change your day-to-day work for the better (e.g. will make me more efficient) or worse (e.g. make my job more complicated)?



97% of respondents said that technology would improve their work efficiency.

The response

What will Vietnamese people do in response to digital transformation?



In order to realise the digital transformation potential and address the concerns of workers and employers, the automation process will need to come hand in hand with training, upskilling and reskilling of the workforce

Christopher Lee (Aik Sern)

Senior Manager,
Consulting Services - Workforce Transformation

The response: What will Vietnamese people do in response to digital transformation?

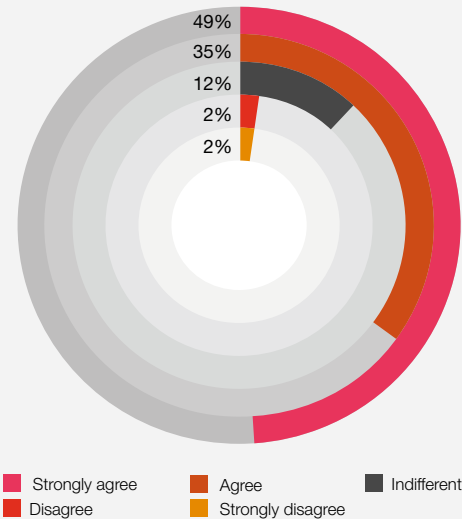
1 There is strong demand for learning

With a strong appetite for learning among our local respondents, there is an opportunity for businesses to play a role. Organisations should develop, or if needed, reexamine their upskilling and reskilling programmes to meet these needs.

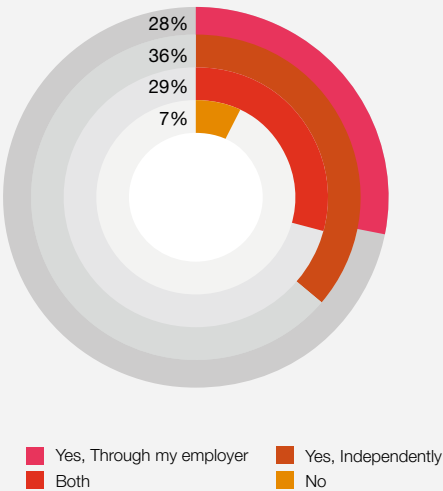
84% would learn new skills now or completely re-train in order to improve future employability, as compared to the responses at global level (77%).

93% are currently learning new skills, with the majority of these respondents saying that they are learning independently.

Q: To what extent do you agree or disagree with the following statement: “I am ready to learn new skills now or completely re-train in order to improve my future employability”



Q: Are you learning new skills to better understand or use technology - either through your employer or independently? Select all that apply.



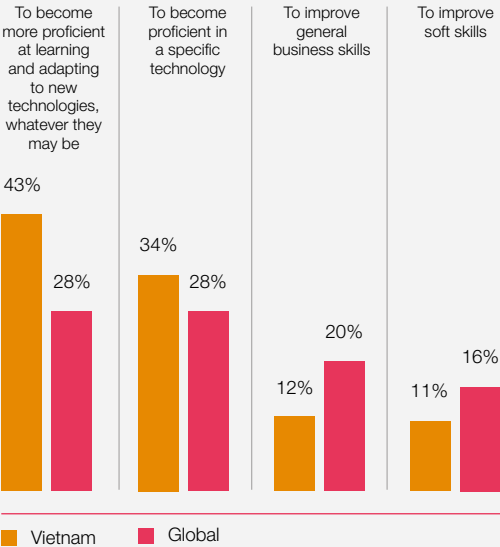
2

Proficiency in learning and adapting to new technologies is in high demand

43% want to become more proficient at learning and adapting to new technologies

34% would like to develop specialised expertise in specific technologies.


Q: What type of workplace skills would you most like to develop?



These results, which are much higher than the global responses, reflect the strong desire for Vietnamese to stay relevant in the coming digital age. It is worth noting that although the desire for non-digital skill sets (i.e. business skills and soft skills) are lower than global, these are still important skills. In times of uncertainty, skills like agility, problem solving and leadership, to name a few, will help Vietnamese people face challenges head-on.

The support

How should Vietnamese people be supported?



Business leaders, governments
and educational institutions
- must work together to
upskill our people to meet the
workforce needs of the future
and drive sustainable economic
growth for Vietnam

Dinh Thi Quynh Van
General Director, PwC Vietnam

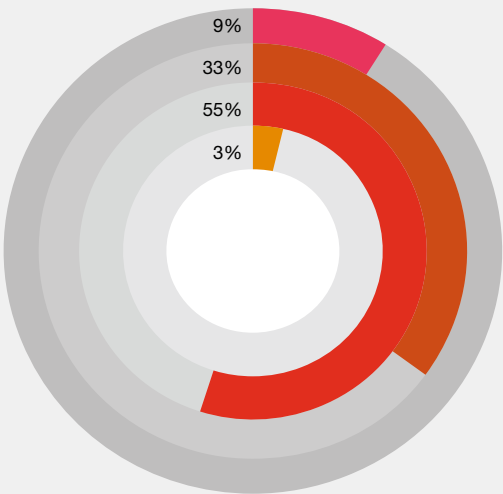
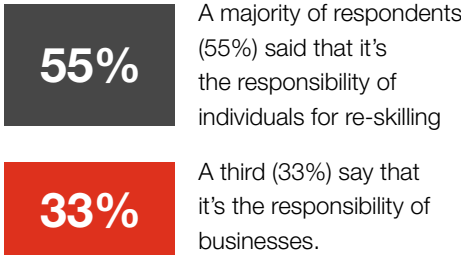
The support: How should Vietnamese people be supported?

1 Businesses and governments can play important roles in addressing the upskilling gap

Despite a strong desire for learning amongst the respondents, what is clear is that a skills framework is also needed. This was reflected in our 2018 Vietnam Industry 4.0 survey where 84% of respondents indicated

they need guidance on Industry 4.0 capability development.

We expect the skills and competencies will constantly evolve as a result of the disruptive changes of technologies. The labour force needs to update and improve themselves continuously or risk being left behind or laid off as robots take over some jobs. Thus we believe both businesses and the government have important roles to play in ensuring the workforce have access to inclusive programmes.



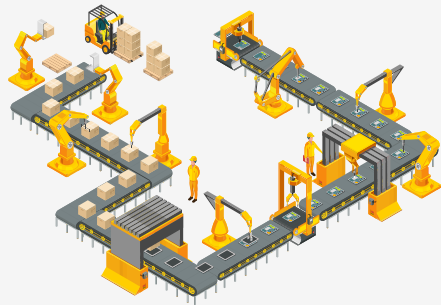
Q: Of the following organisations, who do you think is most responsible for helping people to upskill?

- Governments
- Businesses
- Individuals
- Others

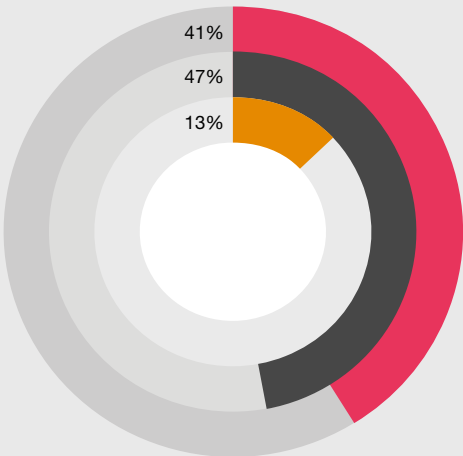
2 Organisations are doing their part to meet the upskilling needs of their workers.

88%

of our respondents said that they are provided opportunities to improve their digital skills.



Q: Is your current employer giving you the opportunity to improve your digital skills outside your normal duties?



- Yes – many opportunities
- Yes - some opportunities
- No opportunities at all

Note: Not all figures add up to 100% as a result of rounding percentages.

This shows that employers themselves have an understanding of the needs of their workforce, but there are things to look out for.

The survey also revealed the top 3 areas that will increase the likelihood of employee participation in skills training:

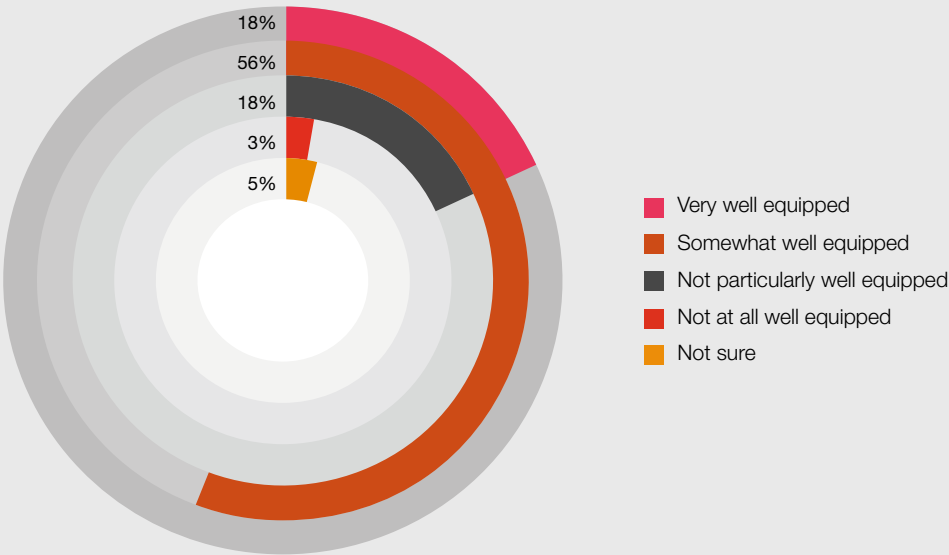
- i) if there is no extra time commitment
- ii) if it is specific to the role
- iii) if it offers an opportunity to increase earnings.

73%

said that they are well-equipped in using new technologies in workplace.

Organisations should assess their current and future business needs. This will help them identify the skills gaps and mismatches that may be present, and guide them in building or updating a skills strategy that closely aligns with their business goals. Investment into talent development will yield benefits.

Q: How well equipped do you feel in using new technologies in your workplace?



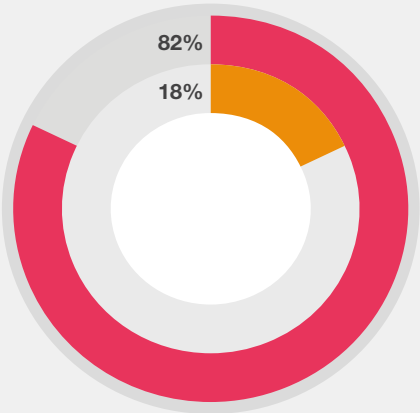
3 Remote work will be in higher demand

Although Vietnam has been relatively isolated from the impact of COVID-19 compared to the rest of the world, remote work is still an emerging trend that should be considered.

82%

believe that working from home will become more prevalent, even post COVID-19.

Q: Going forward, do you think that working from home will become more widespread in your line of work post COVID-19?



Yes No

The support: How should Vietnamese people be supported?

4 Technology and process are key productivity enablers for remote workers

This shows that at an individual level, Vietnamese workers for the most part, are capable of adapting to the new remote working environment. Companies that make the shift will be able to more seamlessly take advantage of the benefits of working from home.

Our respondents, however, indicated three key factors that can limit the productivity of working from home:

- 35% the work process
- 31% the tools and technology and
- 17% the organisational culture

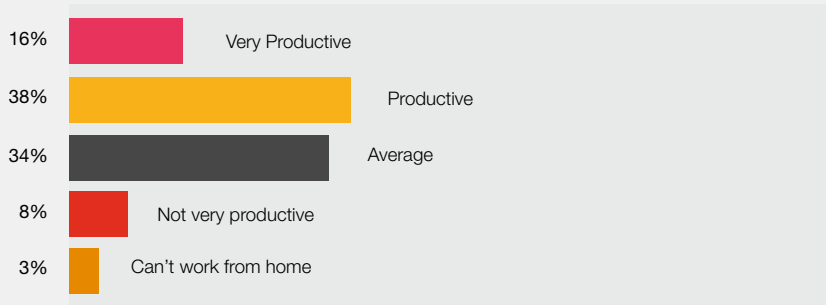
54%

of respondents said that they were productive while working from home.

This, however, varied across age groups, with younger generations reporting higher productivity.

Q: How productive are you when having to work from home?

Note: Not all figures add up to 100% as a result of rounding percentages.



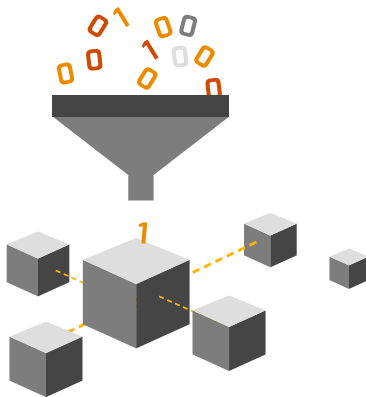
What's next?


There is need for collaborations among governments, institutions and businesses

Technology is only as good as the leaders who identify its technological opportunities, the technologists who deliver them and the people who work with them every day.

Our world today is facing a skills crisis. Automation is threatening many existing jobs. At the same time, there is a shortage of qualified talent for the new digital economy. Together, these two factors have widened the gap between the employees of the present and the workforce of the future. Solutions to the challenge of upskilling will need to be developed at the local, regional and national levels, and no one organisation can do this alone. The need to upskill is a complex problem that will require decision-makers - governments, educators, and business leaders - to come together.

- Government leaders and policymakers need to ensure that citizens have the knowledge to participate, and they themselves have the knowledge to drive discussion on the future of technology and regulation.
- Institutions, such as those that make up the education system, need to transform themselves digitally and, at the same time, provide services that are fit for the future.





Governments as a whole can also play a direct role through upskilling their own workforce – as a major employer.

We suggest key actions for the government to consider when developing a framework for upskilling:

Provide for fundamental needs, prioritising the vulnerable and those in greatest need

Design and launch a national upskilling programme which prioritises investments in industries that are most likely to be impacted by automation over the next five years.

The government should commit to a new target, seizing the opportunity presented by automation to close the skills gap among socio-economic groups.

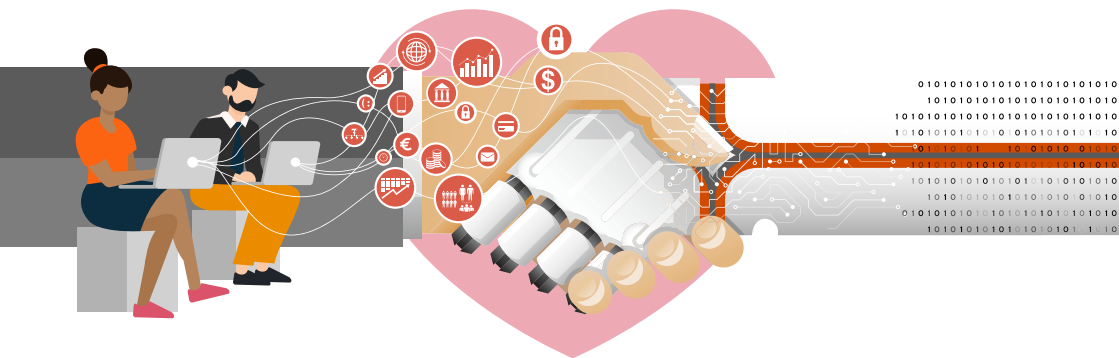
Help people earn a decent living and prepare them for the future world of work

While the responsibility to upskill the workforce of the private sector primarily falls on employers and other business organisations, the government should consider supporting them by ensuring that transitional funding is available to help SMEs cover the costs of training, potentially subsidising costs for employers that would struggle.

Close the opportunity gap that exists between places

There should be programmes which aims to boost social mobility by removing obstacles that could

stop people from achieving their potential. These would be in regions that are most prone to being negatively impacted by automation and related changes.



Give individuals more control over the services they access

Government and business should invite the emerging govtech sector to produce innovative ideas for making it easier for individuals to access learning opportunities in ways which suit them (online, mobile learning, using AI to make it bespoke to the learner). In the National Plan for Digital Transformation, the Vietnamese government has set out a target towards more platform-based and tailored training to meet the specialised needs of different people

Empower communities to shape the places in which they live

All local officials should assess the impact of automation in the places they are responsible for and develop local and regional upskilling programmes. These programmes should be aligned with local industrial strategies, and agreements between central and local government about devolution. Within the National Plan for Digital Transformation the government has set plans for training in various sectors which will have regional implications, including for agriculture and organisations in industrial parks and export zones.

Organisations should take steps to prepare their workforce for the digital world

We suggest five steps for organisation leaders to consider:

1 Identify skills gaps and mismatches

Assess the current and future needs, allocate resources and prioritise mismatches.

2 Build a future-proof skills strategy

Build strategic plans to deal with the skills gaps which have the most impact on delivering business value.

3 Lay the cultural foundation

Use culture as the bedrock of an organisation's upskilling efforts. Create a cultural shift and the right behaviours. Inspire citizen-led innovation. Nurture physical vitality and mental wellbeing.

4 Develop and implement upskilling


Create and deploy programmes which harness the organisation's culture and use key behavioural economics principles to deliver the right learning experience and rapid results.

5 Evaluate return on investment

Measure the return on investment (ROI) from upskilling programmes.

Find out more about some metrics to track ROI in this report¹¹.

¹¹ PwC - Fit to compete: Accelerating digital workforce transformation in financial services, 2019



As individuals, it's important to have a clear view of what the future megatrends look like, the roles we play, the actions we should take.

We believe that individuals should:



Understand the big picture

Pay attention:

Understand how technology is developing and what it and the other megatrends could mean for the world of work – and you specifically.

Expect the unexpected:

Use our four Worlds of Work¹² to consider how different the world could look and plan for multiple scenarios and outcomes.



Plan for an automated world

Find the gaps: In an automated world we will still need human workers. Whether this is working to develop technology, alongside it, or more specifically; very specialist types of employment – the places automation simply can't compete yet. Work out where you want to be.

Get your skills in order: The skills needed for the future are not just about science and technology. Human skills like creativity, leadership and empathy will be in demand. Identify the skills you need and start focusing on how to build them – and how to use them alongside technology.




Take action

Adapt to survive: The human race is infinitely adaptable but also risk averse. Work out what holds you back – whether structural and financial (loans, mortgages, responsibilities) or emotional. Work out what matters to you and your family and plan for change.

Jump on a passing ship: There is no one future-proof career, only better options for you. Determine how to get to the 'next better thing'.

¹² PwC - Workforce of the future, 2018



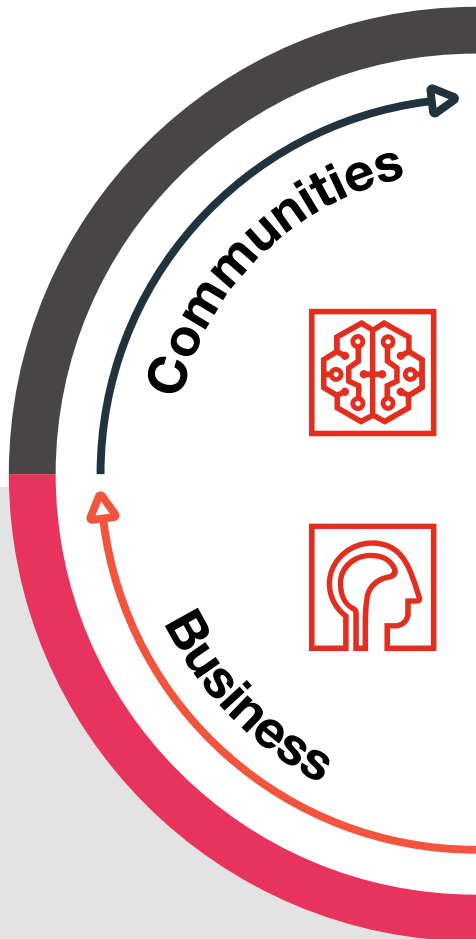
Our responsibility to one another on self-upskilling begins at home, and extends to the communities where we live, work and play.

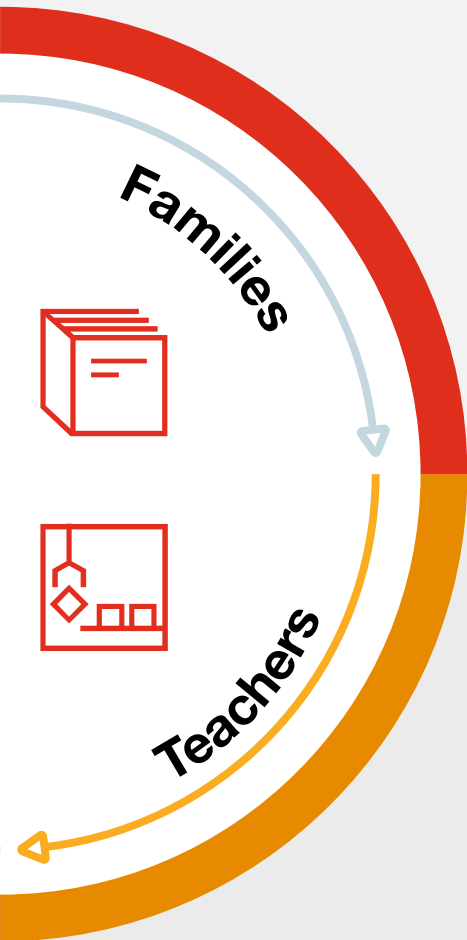
Share with friends and communities about what the future of technology holds for all of us:

- Whether it's self-aware robots, smart clothing, or an unhackable quantum internet, there are a lot of cutting-edge inventions out there.
- Learn about the new privacy laws and how they impact you
- Discover how innovation happens

Learn from industry leaders and experts about how business is changing and what you can do to stay ahead.

- Find out how direct-to-consumer brands are making e-commerce work and what companies need to do to earn trust.
- Tools for working remotely
- Emerging technology
- Roles of the future





Share real-world ideas to help you and your family. Topics on how to manage stress and talk with your children about challenging subjects.

- Be inspired while learning about what's new in the new digital world.
- Preparing for the future of work
- Seven virtual worlds that we're already exploring

Technology and today's realities have changed the way we teach and think about our learning spaces.

- Find out more about learning in the digital age.
- Understanding new technologies and their impact on learning
- Applying design thinking to problem solving

Appendices

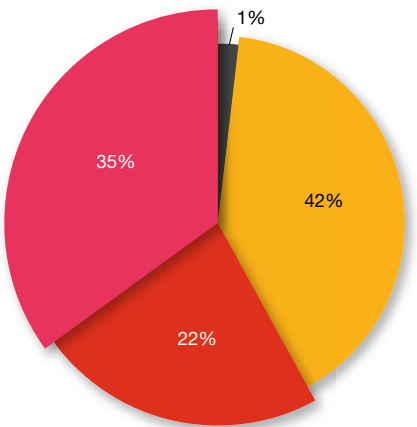


About the Survey

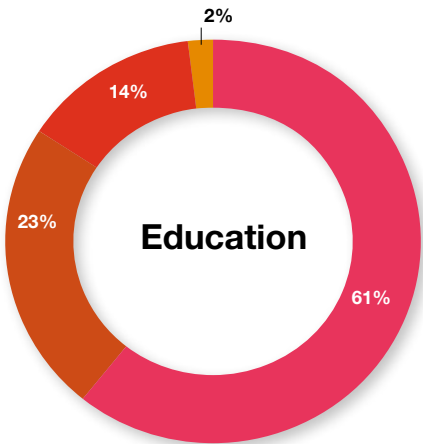
The survey was sent out to the Vietnamese public from 12 November 2020 to 27 December 2020. Participants were asked to answer a list of questions relating to technology, jobs and skills.*

1146 responses were collected.

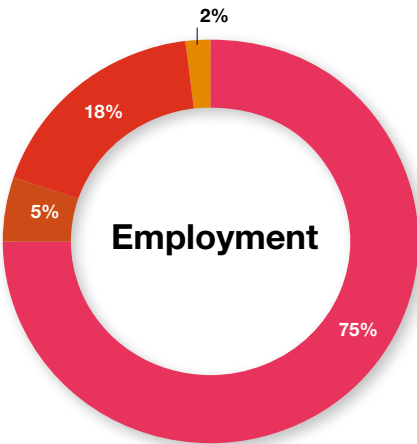
Note: Not all figures add up to 100% as a result of rounding percentages.



Gen Z Gen X
Millennial Baby Boomers



University graduate Post-graduate/ Professional
High-school Technical



Working full-time Working part-time
Student Unemployed

*This report was prepared independently by PwC Vietnam, and is our local version of PwC's Global "Upskilling hopes and fears" report released in 2019 which surveyed over 22,000 adults across 11 countries: Australia, China, France, Germany, India, Netherlands, Poland, Singapore, South Africa, the UK and the US.

PwC's 'New world. New skills.' programme

'New world. New skills.' is a global initiative by the PwC global network that aims to help millions of people around the world improve their understanding, skills and knowledge for the digital world. We believe that businesses, governments, educators and citizens play important roles in narrowing the digital divide.

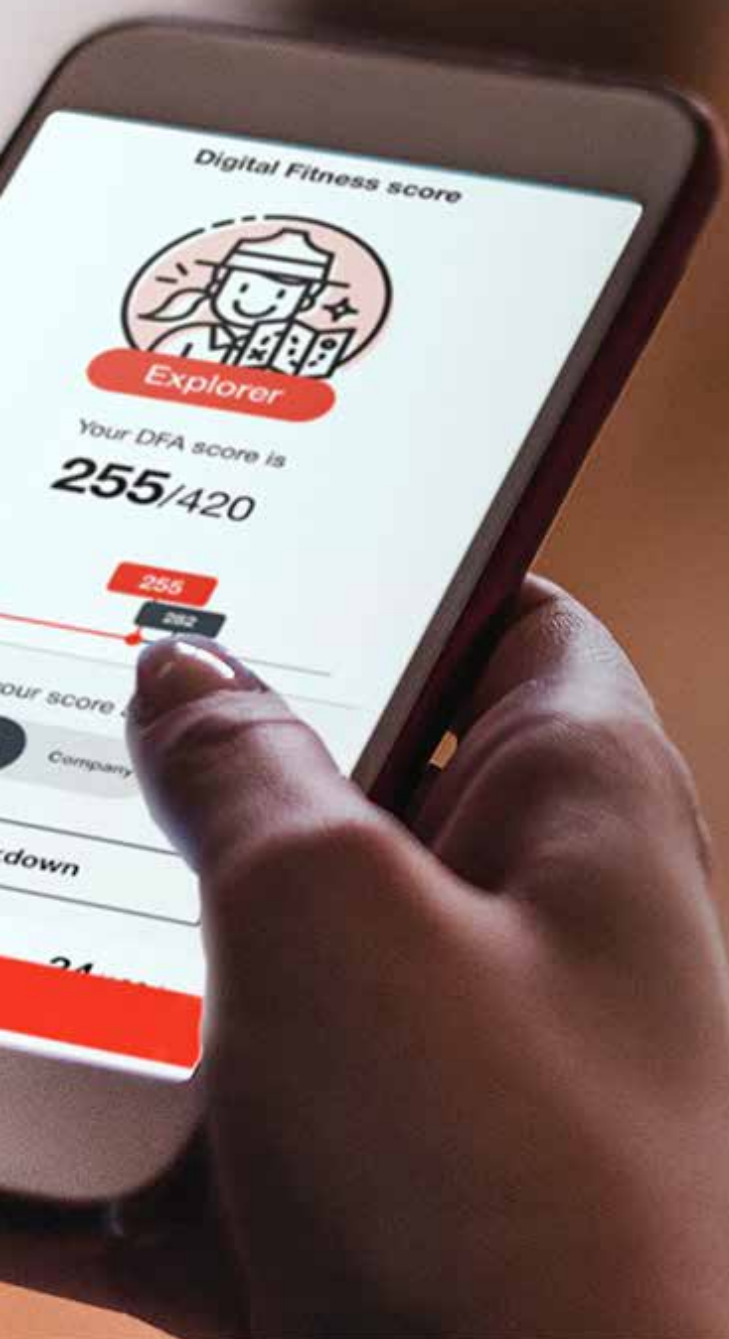
At PwC Vietnam, we have invested in training to ensure our people are prepared for the future of work. We are also committed to doing our part in reaching underserved communities who may not have access to upskilling opportunities, in order to ensure no one gets left behind. There's an urgent need for organisations, governments, educators and citizens to

come together to address this growing problem.

To help Vietnamese people upskill, we have made our Digital Fitness app free*, and you can download today from the Apple App Store and Google Play. Just use the invite code: LRNALL. Find out more resources at www.pwc.com/upskilling.

Scan QR code to get the app







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