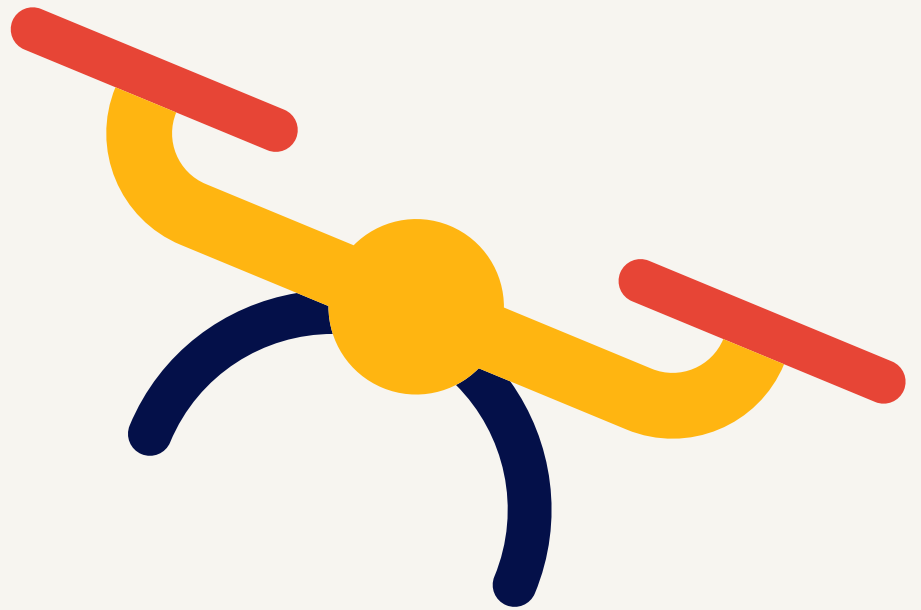


# skills and jobs



## of the future.





1

the jobs of  
the future.

2

looking  
further ahead.

3

ready to compete  
for prized talent.

4

begin building for  
the future today.

# securing the people you need to succeed.

It's already difficult enough to bridge skills gaps in traditional roles, and even more so in today's candidate-driven market where vacancies outweigh qualified personnel.

Governments are also urging companies to bring forward their hiring plans to prevent the 'fading of skills', which would potentially create a lasting impact on our local workforce's ability to keep up with business demands.

But what about the skills that are needed in a rapidly evolving and highly volatile economy? Jobs that barely existed ten years ago are becoming increasingly critical to the world of work in the future, from artificial intelligence (AI) to data storytelling, from business psychology to financial wellness coaching.

While the COVID-19 outbreak has shifted the labour demand dynamics in the short-term, the longer-term impact on both technical and soft skills demands could only be greater.

“If you can dream it,  
you can do it.”

Walt Disney



# 1



# the jobs of the future.

According to the World Economic Forum's 'The Future of Jobs Report', by 2020 more than a third of the desired core skill sets of most occupations will consist of skills that are not yet considered crucial to the job.

The World Economic Forum also highlighted that as jobs are transformed by the technologies of the Fourth Industrial Revolution, we would need to re-skill more than 1 billion people by 2030. By 2022, 42% of core skills required to perform existing jobs are expected to change.

Automation, workforce ageing and the rising unemployment rate as a result of COVID-19 have sparked public debate and raised valid concerns over the future of work. Society and its leaders are acknowledging that things will never return to normal and are finding their role in fostering economic growth and ensuring decent work, fair pay and adequate social security.

Even though the labour market looks like it is in limbo right now, the reality is that business restructuring and digitalisation are still happening, just not all at the same time. Companies and professionals that will emerge stronger from this pandemic are those that have been given the opportunity and are willing to take the dive.

The future of work is shaped by many factors, from technological to institutional and cultural. According to the '[Emerging Jobs: Singapore](#)' report published by LinkedIn, the top five emerging jobs in the future are data scientist, cybersecurity specialist, user experience designer, head of digital and content specialist.

Besides data-driven roles, there is a focus on increasing climate change and green economy jobs. We've already observed those changes in sectors such as banking and financial services, construction and property as well as energy and commodities.

Out of them all, 'AI specialist' sits at number one on the list of the fastest-growing jobs. The business impact of AI is already evident in our daily lives, from online search to on-demand TV. Transport and logistics are set to be turned on their head by the advent of driverless vehicles, for example. This creates a huge demand for people who can design and manage this new generation of logistical and technological systems. And yet, this is only the beginning.

A considerable amount of traditional jobs like accountancy, finance, manufacturing and even medical diagnosis could also be taken on by self-learning AI. People would still be very much part of the process, but their responsibilities and focus would switch from hands-on delivery to the development, training and oversight of the machines.

## how are skill demands changing?

### the jobs of today

1. software developer
2. clinical researcher
3. data manager
4. cyber security specialist
5. risk and compliance specialist

### the jobs of tomorrow

1. delivery drone pilot
2. robotics engineer
3. automation specialist
4. artificial intelligence architect
5. alternative energy specialist



## lead with change

On the management level, professionals will need to judge the strategic potential of emerging technologies with AI and project manage the delivery of new systems capabilities. This is leading to a growing demand for chief innovation officers (to lead innovation and the commercialising of new technology) and chief digital officers (to manage change).

These capabilities are also becoming core skill sets for all senior executives, especially as many companies may not have the resources to maintain specialist posts for the long term. It will also be likely for job responsibilities and titles to change significantly at the management level in the next few years.

For example, the role of a chief financial officer could evolve to that of chief finance analytical officer. This 'new role' would require the C-suite to use data intelligence and calculated analytics to make informed decisions that will bring value to the business. It has also been highlighted that 41% of their time will be spent on non-financial related activities such as performance management, organisational transformation and keeping up to date with the financial tech trends.

After senior management, managers and executives in the junior to middle management level will similarly be evaluated for their skills and how they can contribute to the business moving forward. One of the key workforce planning challenges that companies are facing right now is having to judge and decide what skills they will need to keep within the business.



## lead with work

In an interview for Randstad's 'Standing Out: Insights from organisations with great employer brands', Philips' Head of Workforce Strategy Maarten Hansson said, "As we tap into the gig economy, the HR focus is shifting from managing people to leading work. We need to find the most effective way to engage with the right people and get the work done."

Martina De Marinis, Philips' Global Campaign Manager, recruitment marketing and employer branding, expanded further on this strategy, "A key part of this is showing that working with us isn't just another assignment, but a project that can inspire and help them to progress their freelance career. Examples of the messages include 'don't just accept a new project, accept a challenge' and 'surprise yourself with an assignment at Philips.'"

Yet, change is never easy. It is common to face resistance and hesitation as some would prefer to see results before committing themselves to it. This is especially true for radical changes that we might see soon.

One of the key workforce planning challenges is knowing what particular skills you would need within your business. For example, the AI specialist role that heads LinkedIn's fastest emerging jobs list covers many thousands of distinct job specifications. HR professionals will need to work closely with the management and business teams and be adept at making these business-specific judgements with regards to their talent strategy.

The other key challenge is headcount. Too many people and the business is neither efficient nor productive; too few and a toxic culture may manifest itself. Some indication comes from banking group NAB, which is looking to hire nearly 2,000 data scientists, AI experts and other tech specialists as part of a major transformation of its business. That's more than 5% of its workforce.

It is no secret that tech specialists are already in short supply. Those who were equipped with in-demand skills could still find a job and negotiate for a salary increment even when COVID-19 was at its peak. Companies that are seeking such talent struggle to bring in the numbers they need. That is why contingent and contract personnel are going to be so important.

Philips is a leading health technology company with an ever-increasing demand for technical specialists in areas such as software development, data science and systems architecture. Having recognised that the right person may just as easily be a freelancer or remote worker as opposed to a full-time employee, has spurred Philips to revamp its talent sourcing and management model.

## gauging the impact of the COVID-19 outbreak on skills demands.



The COVID-19 outbreak and the resultant shutdowns and stay at home orders have had a huge impact on the local workforce. Millions of employees have shifted to remote working.

Some sectors, such as hospitality and commercial aviation, have had to temporarily suspend business altogether. Yet, labour demand has increased in other areas like food supply, call-centre operations and IT. In response, the government has set up the National Jobs Council to grow jobs and training opportunities on a much greater scale than anything attempted before.

The package aims to support close to 100,000 job seekers over the next 12 months by creating new vacancies, traineeships and skills training places.

It is acknowledged that the easing of restrictions is a gradual process and can't be rushed. As businesses adjust to this 'new normal,' we're likely to see an increase in demand for specialists in areas such as cybersecurity, digital collaboration and data and behavioural analytics.

The enduring impact could be even more profound. The pandemic looks set to accelerate digital transformation and the resulting need for organisation-wide upskilling, having highlighted the importance of digital customer engagement and employee collaboration. With more people wanting to work remotely even after the emergency subsidies, new types of management skills will be required.

Ultimately, the crisis has underlined the value of creativity and adaptability in transferring skills, embracing new ways of working and thinking on your feet.

## tech and touch

The in-demand skill sets of the future go far beyond digital capabilities. As automation and AI become increasingly prevalent, it has also become more apparent that there are innate human skills that can't be replaced by machines. Capabilities like intuition, empathy and creativity – are becoming ever more valuable differentiators.

Analysis carried out by McKinsey anticipates that deployment of social and emotional skills will expand by more than 25% by 2030 as a result. An example of this interplay between tech and human touch is the development of the systems used by companies like Netflix to personalise recommendations for their on-demand content. To train its AI, Netflix breaks down movies and people's responses to them into thousands of micro-genres and emotional touchpoints.

This requires a distinctly human type of emotional intelligence and psychological insight (EQ). Similarly, engineering giant, Siemens, recognises that finding solutions for transport, sustainability and other challenges faced in today's communities demands human insight, experience and interaction, as well as data and tech systems.

Christoph Knorn, Siemens' Global Director of Employer Branding, in an interview for Randstad's 'Standing Out', said, "Everything we do has a human dimension – we call this 'making real what matters.' While data is our tool, we know that data alone can't provide solutions. We bring customers, creators and developers together, so we can learn and collaborate."

The roles of cybersecurity experts, as well as web and digital specialists, further underline the need for both technical capabilities and human insight. The move to remote working as a result of the COVID-19 outbreak is likely to accelerate demand for both types of skills.



## customers want action

Cybersecurity is as much about getting inside the minds of potential hackers, attackers and criminal groups as the technical skills needed to prevent, detect and stem a breach in security. That's why people who've worked in the intelligence services and even ex-hackers are in such high demand within cybersecurity consultancies and in-house teams.

Similarly, a digital specialist needs to be able to find patterns within the reams of data flowing through the business and have the creativity to turn this analysis into actionable leads and campaigns. That, in turn, raises the question of whether it's better to take a marketing professional and teach them the necessary technical know-how or move someone from a data or IT background into marketing. However, there is the likelihood that traditional roles will be made redundant in the long-term, as the marketer of tomorrow will be trained in both disciplines from the outset.

While technology is one of the forces reshaping customer expectations and the demands of your organisation, it's far from being the only one. Your customers are looking more closely at your record on emissions and sustainability.

Even within business-to-business commerce, we see a growing focus on environmental, social and governance (ESG) factors within strategy and performance evaluation. There has also been an increasing focus on ethical investments within the banking and financial services sector, as Asian investors are starting to realise the scale of their returns and their impact on the environment through their business deals.

Another example of this trend can be seen in the fast-moving consumer goods industry. Big companies are investing in research and development to replace plastic bottles and rings with either recycled or biodegradable materials. These efforts are also applauded by the increasing number of environmentally-conscious consumers who are looking for green alternatives in the marketplace to reduce their carbon footprint.

This trend will likely result in a growing demand for people with expertise in managing environmental and social impacts, as well as developing a new generation of carbon-neutral products and production processes. Due to the sheer lack of talent specialising in these disciplines, we anticipate it will be much harder for companies to hire talent with these skill sets than AI and cybersecurity specialists.

# 2



# looking further ahead.

What will the in-demand roles be in ten years if the emerging ones we are seeking now are AI or sustainability experts?

The future is up to us to imagine and create.

Careers advisory consultancy, Crimson, has explored the latest frontier technologies to compile a list of jobs top graduates might be competing for in 10 years. While jobs like memory surgeon or extinct species revivalist might look like science fiction, imagine describing an app developer or social media influencer to someone back in the year 2000.

According to the World Economic Forum, "In such a rapidly evolving employment landscape, the ability to anticipate and prepare for future skills requirements, job content and the aggregate effect on employment is increasingly critical for businesses, governments and individuals to fully seize the opportunities presented by these trends and to mitigate undesirable outcomes."

It will not be a surprise if future menus in Michelin-starred restaurants are created based on data about the changing taste palettes and patterns of customers, or if robots are being used for the prep work back in the kitchen. It should also be noted that some restaurants are already using robots to customise cocktails, prepare sushi and to serve customers. While it looks like technology is driving these changes, the real motivator is, and should always be, customer behaviour and demands.

# predicted future roles.



commercial  
space pilot



underwater  
city developer



flying personal  
mobility device  
designer



holographic  
telecommunication  
specialist



memory  
surgeon





“The best way to predict  
the future is to create it.”

Abraham Lincoln

3



# ready to compete for prized talent.

How, then, can your business get out in front in defining and securing your future skills needs?

## 1. plan talent needs around disruptive trends

In defining your skills needs, it's important to keep track of emerging developments, such as your customer expectations, as well as technology advancements.

You can then evaluate the opportunities and disruptive threats that might be present.

Where are customer expectations heading?  
What opportunities does emerging technology offer your business?  
What capabilities do you need to capitalise on?

You might not know what those skills are, or they may not have a job title just yet. However, you can map out potential scenarios and develop feasible options to address them.

For example, if you are running a logistics company, consider the type of skills your employees would need if your warehouse becomes mostly AI-operated and your fleet moves to semi or fully autonomous vehicles. This would help you project the type of essential skills your business would need to survive and sustain in the new normal.

Again, this is not completely new and we are already making small and incremental steps towards optimising efficiency. UPS' gives each driver a specific route to follow and that includes a policy that drivers should never turn toward oncoming traffic unless absolutely necessary.

This is all processed by a very thorough vehicle routing software to reduce the chances of an accident and to cut delays caused by waiting for a gap in the traffic, which could lead to fuel waste.

HR teams should also be closely involved in planning for the future. If you find you have to play catch-up in five years, the talent you need could be prohibitively expensive to hire. Furthermore, if you do not bring forward your hiring plans, the capabilities of your existing workforce will start to fade and eventually expire. It is hence important to get people in jobs fast, particularly in areas that are high in-demand, and it is also crucial that your employees have the basic knowledge they need to have to operate in. Upskilling and re-training them for their future responsibilities would then be much cheaper and manageable.

"The nature of jobs and work tasks will change, and HR has a key role to play in managing these transitions and ensuring that new job roles align with employee knowledge, skills and abilities, and the organisation's strategic position," said Dr Justine Ferrer, current senior lecturer in human resource management at Deakin Business School.



## 2. hire for adaptability

A lot of your future skills needs have yet to emerge. Others could quickly become redundant before you even know it.

Think about your traditional tellers in bank branches where you'd normally go to deposit or withdraw cash for personal use when you were much younger. They've been slowly (and surely) replaced by automated teller machines. As we move towards being a cashless society, such automated teller machines will also be less of a frequent sight.

What will happen to the bank tellers? They will have to be redeployed to other functions within the bank where their skills and experience would be useful, such as becoming a customer experience specialist where they can continue to interact with customers via online platforms.

The agile mindset that enables people to acquire fresh knowledge and adapt to constant change could, therefore, be more important than any specific skill.

In an interview for Randstad's "Standing Out" series, Carlos Gonzaga, head of human resources at Deutsche Bank Italy said, "It doesn't matter how good an economist the candidate is or how strong their technological skills are if they don't have the capacity to adapt, as their skills will soon become obsolete."

Deutsche Bank has set up dedicated assessment centres to help identify and select these nimble-minded recruits. "We look at how people perform within a group dynamic, how well they develop relationships and how effective they are at solving problems. It soon becomes clear which people have what it takes," said Mr Gonzaga.



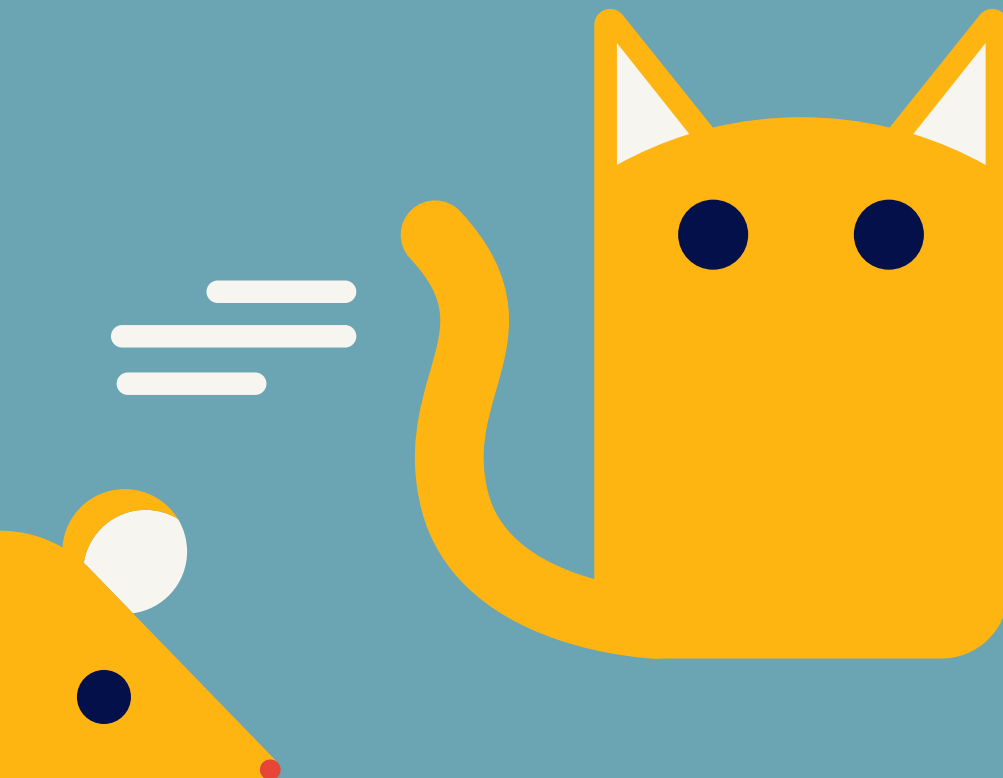
### 3. engage early to build a talent pool for the future

You could engage with budding AI specialists or other prized talent long before they graduate or be an active member of your local startup community.

While large companies have the resources to plan and host innovation launchpads, smaller firms can play friendly and create small communities to interact and exchange ideas through fireside chats or virtual events.

Conferences such as Google I/O or Singapore Fintech Fest have thousands of participants every year. Not only will you be able to establish valuable connections with new talent from these events, you can also keep yourself up-to-date with the latest developments and upcoming trends.

Scouting talent should never be a responsibility that solely lies on the hiring manager. HR professionals should also participate in such activities to familiarise themselves with what employees are looking for in an employer and proactively scout for talent for their internal pipeline. The audience isn't just the people you want now, but students and people working for competitors who can be your potential recruits for the future.



## 4. build your employer brand around more than money

Salary will always be top-of-mind when someone is looking for a new job or employer. It is also one of the top reasons why they leave their current employers.

For example, a working professional may be attracted to the role of a local HR manager for S\$100,000 a year excluding bonus, which is well above the market average. However, once they are in the role, they may find themselves having to make decisions that are above their pay grade and potentially getting blamed for making the wrong move. Or they might find themselves being overwhelmed with work and having to sacrifice their social life and sleep just to meet deadlines. These are not uncommon situations that employees often find themselves in, particularly if they are moving just for the money.

This is why it is so important to create a holistic and wholesome experience for your employees, that goes beyond offering an attractive salary. Many job seekers are starting to prioritise other factors such as flexible work arrangements, working environment, reporting lines and job content. There are also some others who will look at how financially stable a company is, and its ability to sustain its workforce when a recession or crisis hits.

While employers may have once underestimated the importance of employee benefits and culture, these factors have gained more significance this year. When customers are not buying, companies cannot sell, which severely impacts the bottom line. This means that employers will no longer have the budget to enter a price war to attract prized talent. Instead, they have to look at what else they can offer as a company.

Organisations that can offer a chance to employees to upskill and develop their skills, or to venture into new roles, will appeal to both job seekers and employees. People want to feel more than just being a worker for a firm. Employees want to feel that the company is as invested in their development as much as they do for themselves. When they feel that they are being looked after, they will be more motivated and hence, more likely to succeed.

IBM offers staff the chance to make a difference to their communities through initiatives such as Smarter Cities. Through the initiative, employees are encouraged to explore using technology to promote economic competitiveness, make more efficient use of resources and improve the quality of life. "People know that when they come to work for us that our global reach and commitment to 'innovation that matters' means that they can make an impact. They can contribute to clients' success. They can also improve the lives of communities across Spain," says Pilar Pons, IBM's HR director for Spain, Portugal, Greece and Israel.

4





# begin building for the future today.

The skills you need in ten, even five years could be very different from today.

You can't always predict what these in-demand skills will be, but you can still prepare. The more you plan and develop from within, the less you'll have to play catch-up in the near future.

An individual's adaptability and the focus on regular upskilling needed to keep skills current could be more important than any specific capability in this fast-moving and volatile environment. Your super skill should be the ability to spot emerging trends and what this means for your business and its workforce.

Early talent engagement and having a compelling employer brand will put you on the front foot in reaching out to new and different types of talent as demands evolve – allowing you to stay competitive regardless of market challenges.

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