EMERGING JOBS AND SKILLS REPORT
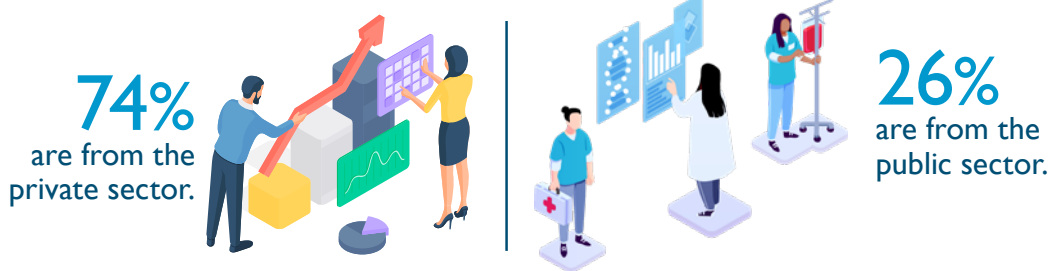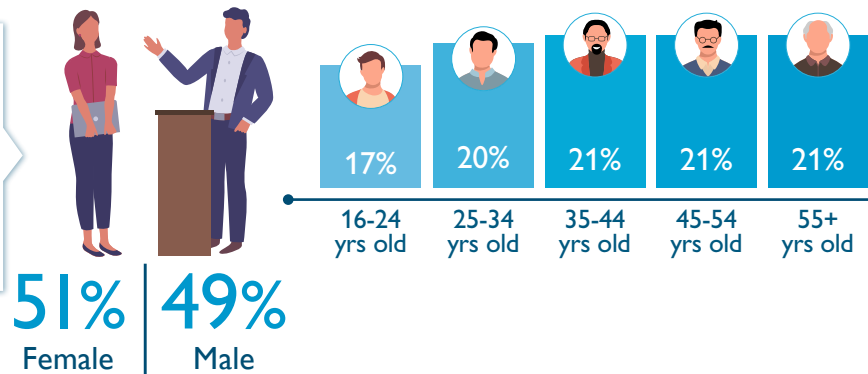
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ABOUT THE RESEARCH

Research Methodology

Over 650 working professionals from Singapore were surveyed at the start of December 2021. The respondents included 450 full-time working employees (with a reporting manager) and 200 employers (middle, senior managers or directors and above who makes hiring decisions) to uncover a dual perspective about the current job market, emerging jobs and skills as well as the training landscape in Singapore.

Profile of Respondents

EMPLOYEES SURVEY

Out of a total of 450 respondents that completed the employees survey online, there was an equal distribution of gender and age groups.

17%	20%	21%	21%	21%
16-24 yrs old	25-34 yrs old	35-44 yrs old	45-54 yrs old	55+ yrs old

51% Female | **49%** Male

74% are from the private sector.

26% are from the public sector.

The respondents span across all six industry clusters.

17% MANUFACTURING	8% BUILT ENVIRONMENT	8% TRADE & CONNECTIVITY
12% ESSENTIAL DOMESTIC SERVICES	28% MODERN SERVICES	9% LIFESTYLE / 18% OTHERS
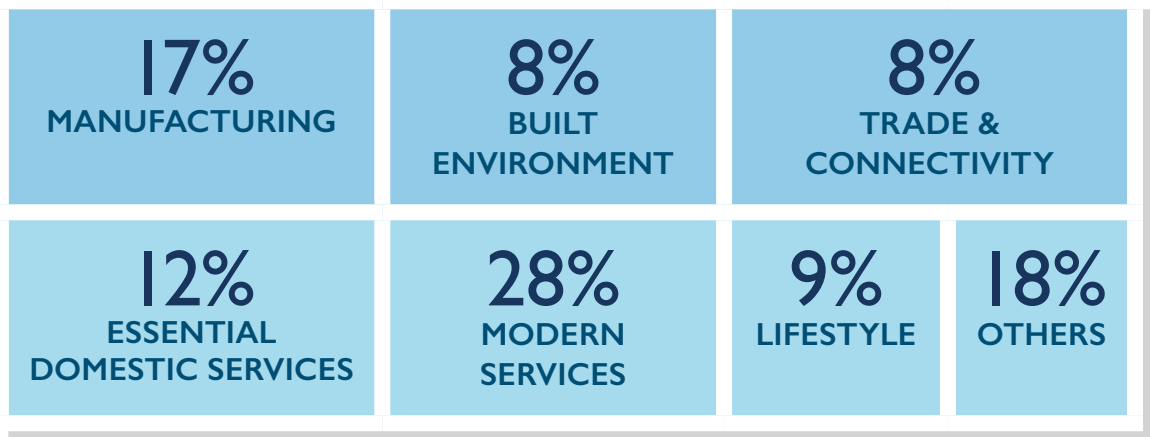
EMPLOYERS SURVEY

Out of a total of 200 respondents that completed the employers survey online, there was an equal distribution of gender.

52% Female | **48%** Male

16-24 yrs old	25-34 yrs old	35-44 yrs old	45-54 yrs old	55+ yrs old
4%	39%	36%	10%	11%
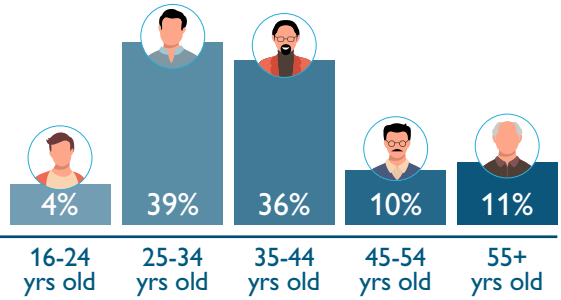
71% are from the private sector.

29% are from the public sector.

The respondents span across all six industry clusters.

15% MANUFACTURING	15% BUILT ENVIRONMENT	15% TRADE & CONNECTIVITY
15% ESSENTIAL DOMESTIC SERVICES	15% MODERN SERVICES	15% LIFESTYLE · 10% OTHERS

INTRODUCTION

The pace of digital transformation at the workplace, coupled with the changes brought about by COVID-19, has created a 'double-disruption' scenario for workers and businesses alike. Many had to grapple with the sudden shift to remote working, and at the same time, were expected to be equipped with the necessary skills to perform business online.

To overcome this continued disruption into the endemic era, the onus is on both employers and employees to embrace a strong learning culture to ensure a more agile workforce that will be adept in responding to digitalisation[1]. While strong emphasis must be placed on technology skillsets, the hallmark of digital transformation lies with the organisation's human capital[2] – where employees' adaptive skills supplements and adds value to functions which technologies are incapable of fulfilling.

To help workers and companies build a more resilient workforce, NTUC LearningHub (NTUC LHUB) has embarked on a study to uncover a dual perspective about the current job market, training landscape, as well as the jobs and skills coveted by employers in Singapore. A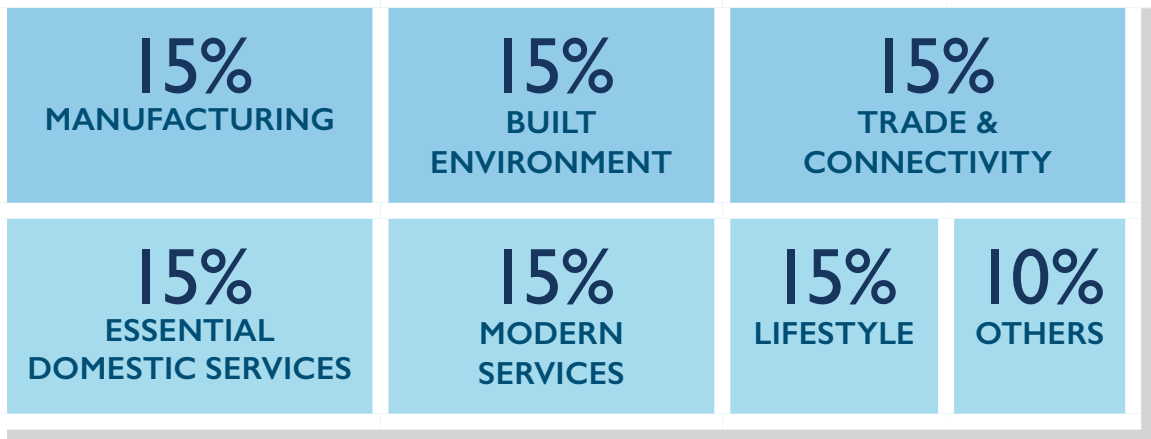dditionally, this report explores job and skills trends according to the six major industry clusters as identified by the Future Economy Council, namely Manufacturing, Built Environment, Trade & Connectivity, Essential Domestic Services, Modern Services and Lifestyle. To provide an extra layer of analysis, we also explored how these sentiments have changed as compared to a year ago, when we launched the first installment of this report, titled The New Normal of Sector Skills 2020 Report.

With this report, NTUC LHUB aims to highlight the trends in our workforce to help employees identify priority skills that they should develop and put forth key jobs that are currently sought after by organisations. Furthermore, we hope that this report will also encourage employers to further support their workforce in upskilling by proactively redesigning workforce learning programmes to instill a corporate learning culture that will ultimately build people competencies and business capabilities.

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1   **World Economic Forum. 2021** Top-down or Bottom-up? How to Cultivate a Digital Culture in Your Organisation. [Accessed 27 December 2021].
2   **World Economic Forum. 2021** Here's Why Closing the Cybersecurity Skills Gap is Critical to Digitalisation. [Accessed 27 December 2021].

KEY TRENDS

Employees' Perspective

I. DUE TO THE POSITIVE OUTLOOK ON THE SINGAPORE JOB MARKET, MANY EMPLOYEES ARE OPEN TO EXPLORING NEW EMPLOYMENT OPPORTUNITIES.

71% of **employees** are either **'very optimistic'**, **'optimistic'** or **'somewhat optimistic'** about the general **outlook of the Singapore job market**.
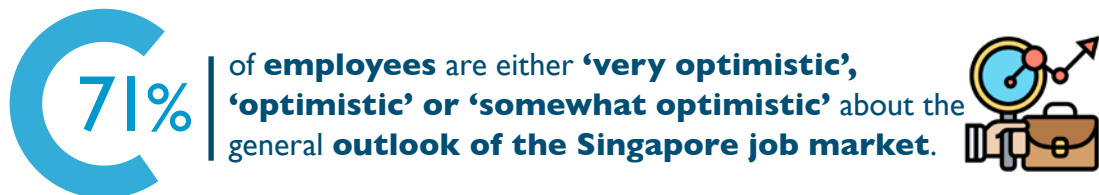
About **seven in ten employees** are either actively looking or open to a new job.

30% of employees are **not looking** for a new job.

10% of employees are **actively looking** for a new job.

60% of employees are **open but not actively looking** for a new job.
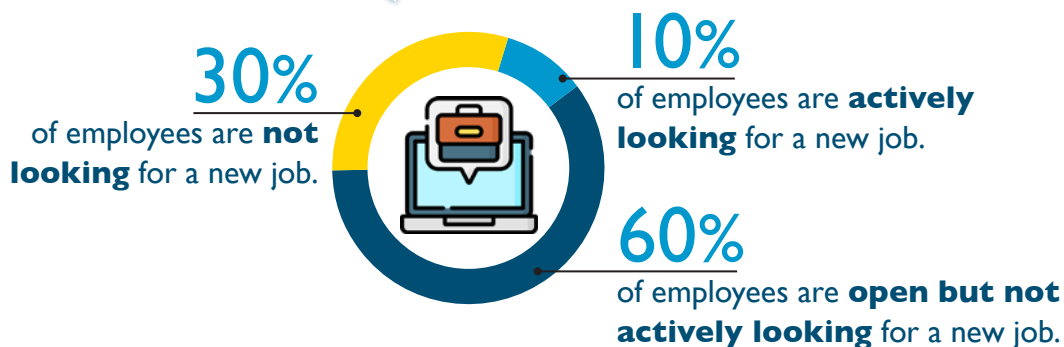
TOP JOB ROLES EMPLOYEES ARE KEEN TO EXPLORE

Data Science Roles

52% of employees are keen on **Data Management** positions.

Marketing Roles

46% of employees are keen on **Digital Marketing** positions.

Business & Sales Roles

40% of employees are keen on **Leadership & Management** positions.

2. EMPLOYEES ARE CONCERNED ABOUT THEIR JOB STABILITY IN THE FACE OF DIGITAL TRANSFORMATION.

81% of **employees** are either **'very concerned'**, **'concerned'** or **'somewhat concerned'** about **the impact of digitalisation** on jobs and roles in their industry.

About **3** in 10 **employees**

31% believe that they will be **replaced due to the lack of skills** amidst digital transformation.

30% fear that **digitalisation will render their role redundant** as tasks will be driven by artificial intelligence.

29% hold the view that **technology adoption** will lead to an overall **decrease in jobs**.

3. THERE IS AN URGENCY FOR SKILLS UPGRADING AMONG WORKERS DUE TO THE NEED TO STAY RELEVANT AND COMPETITIVE.

About **three in five employees** believe that they **need to upgrade their skills** to move into a more resilient industry.

59% Yes
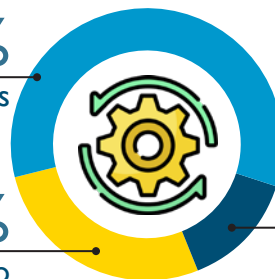
14% No

27% Not sure

Do you see the need to upgrade your skills to move into a more resilient industry?

More than **9** in 10 **employees**
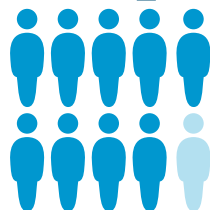
either **'strongly agree', 'agree'** or **'somewhat agree'** that they feel the need to **upskill to keep themselves relevant** in their current role for the next two years.

62% of **employees** say they will **arrange for training resources on their own** such as taking paid online courses outside of work.

TOP SKILLS EMPLOYEES DEEM IMPORTANT TO HAVE

Critical Core Skills

58%

of employees share that **Communication is an important critical core skill** to have.

Technology Skills

50%

of employees believe that **Data Analysis is an important technology skillset** to have.
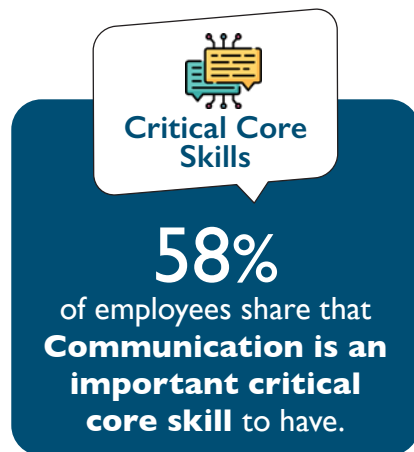
4. EMPLOYEES DESIRE ACTIVE PLANNING AND SUPPORT FROM THEIR COMPANY TO UPSKILL EFFECTIVELY.

90% of **employees** either **'strongly agree', 'agree' or 'somewhat agree'** that they wish their company could have **provided more support** to help with their skills upgrading.
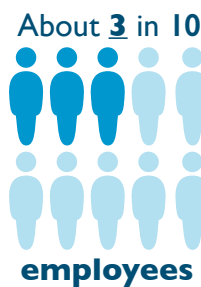
About **3** in **10** **employees** cite that the **'lack of initiative' from their company is an obstacle** they face when upskilling.

More than $\frac{1}{3}$ of **employees** are concerned about the **'lack of support from the company in skills training'** amidst digital transformation.

Employers' Perspective

5. EMPLOYERS ARE LOOKING TO HIRE DUE TO THE OPTIMISTIC OUTLOOK OF THE SINGAPORE JOB MARKET.

76%

of **employers** are either '**very optimistic**', '**optimistic**' or '**somewhat optimistic**' about the Singapore job market.

65%

of **employers have been hiring or intend to hire** new talent to meet their company's current business goals.
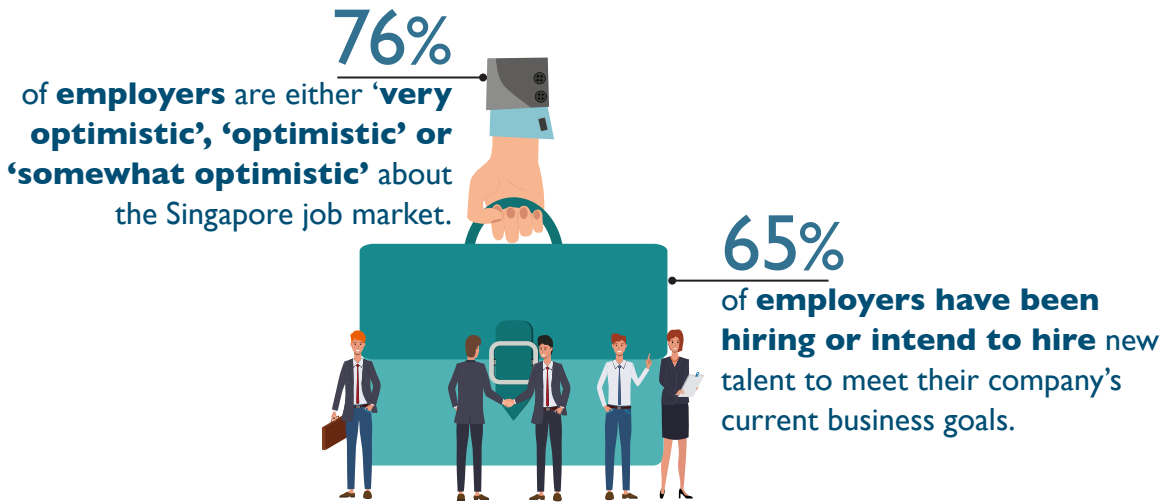
TOP JOB ROLES EMPLOYERS ARE LOOKING TO FILL

Data Science Roles

54%

of employers are hiring talent for positions in **Data Analysis**.

Marketing Roles

45%

of employers are hiring talent to fill positions in **Digital Marketing**.

Business & Sales Roles

45%

of employers are hiring talent to take up jobs in **Strategy & Operations**.
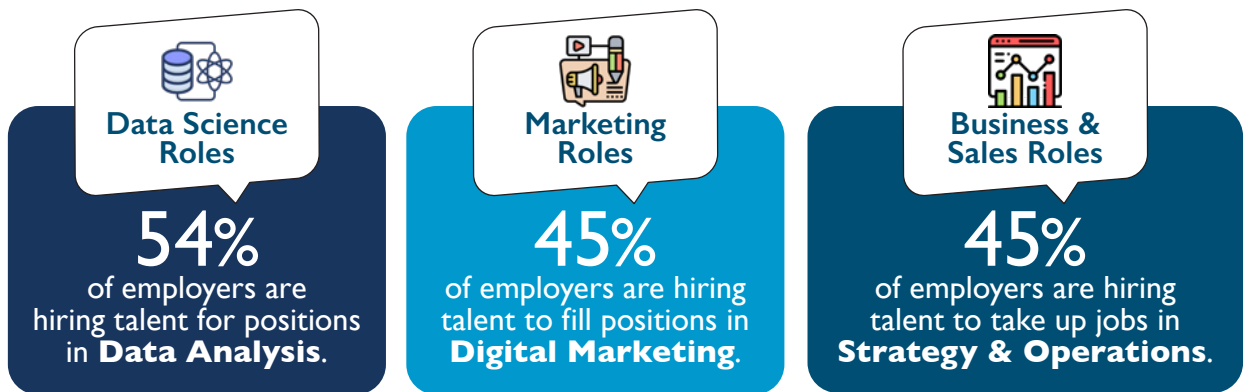
6. DIGITAL TRANSFORMATION HAS ACCELERATED THE NEED FOR WORKFORCE LEARNING.

49% of **employers** say that '**reskilling and upskilling employees with relevant skills**' is a key strategy to focus on amidst the COVID-19 storm.

More than $\frac{1}{2}$ of **employers** believe that '**reskilling and upskilling employees**' is the top consequence of digital transformation.

40% of **employers** hold the view that **technology adoption** '**only leads to upskilling or reskilling**, and not to layoffs'.

7. EMPLOYERS ARE LOOKING TO FILL HYBRID ROLES TO ACHIEVE STRONGER BUSINESS OUTCOMES.

98%
of **employers** either **'strongly agree', 'agree' or 'somewhat agree'** that there is a greater need for employees in **hybrid roles** to meet their business objectives in the next two years.

79%
of **employers** are looking to hire candidates with a **broader set of skills to take up hybrid roles** in the next two years.
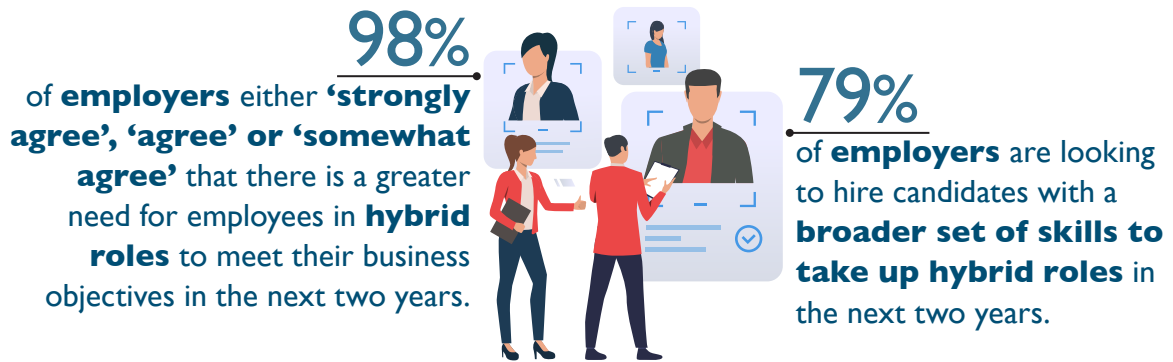
TOP SKILLS EMPLOYERS DEEM IMPORTANT FOR THEIR BUSINESS

Critical Core Skills

68%
of **employers** believe that **Problem Solving** skills are important for their business.

Technology Skills

57%
of **employers** deem **Data Analysis** as an important skill for their business.
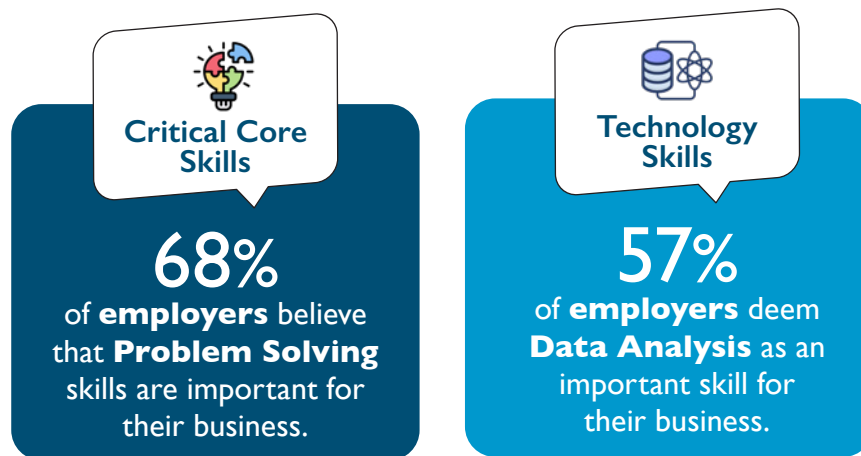
8. UPSKILLING AND RESKILLING WORKERS ARE KEY STRATEGIES FOR COMPANIES TO TACKLE THE PREVALENT TALENT CRUNCH.

78%
of **employers find it difficult to fill roles** due to a **shortage of talent** with the relevant skills.

83%
of **employers have been training or intending to train existing employees** to meet current business goals.

Nearly **3** in 5
employers

reveal that they plan to use **a mix of both internal and external training** to upskill and reskill the workforce in the next two years.

EMPLOYEES' GENERAL OUTLOOK

Employees are more optimistic about the current job market as compared to the previous year.

In 2021,
71%

In 2020,
43%

of **employees** are either **'very optimistic', 'optimistic' or 'somewhat optimistic'** about the Singapore job market.

	Very optimistic	Optimistic	Somewhat optimistic	Somewhat pessimistic	Pessimistic	Very Pessimistic
Overall	2%	23%	46%	21%	5%	2%
Manufacturing	3%	36%	40%	17%	3%	1%
Build Environment	3%	17%	43%	29%	6%	3%
Trade & Connectivity	3%	15%	50%	29%	3%	
Essential Domestic Services	2%	30%	48%	13%	6%	2%
Modern Services	2%	21%	52%	17%	7%	2%
Lifestyle	5%	26%	38%	23%	8%	

■ Very optimistic ■ Optimistic ■ Somewhat optimistic ■ Somewhat pessimistic ■ Pessimistic ■ Very Pessimistic
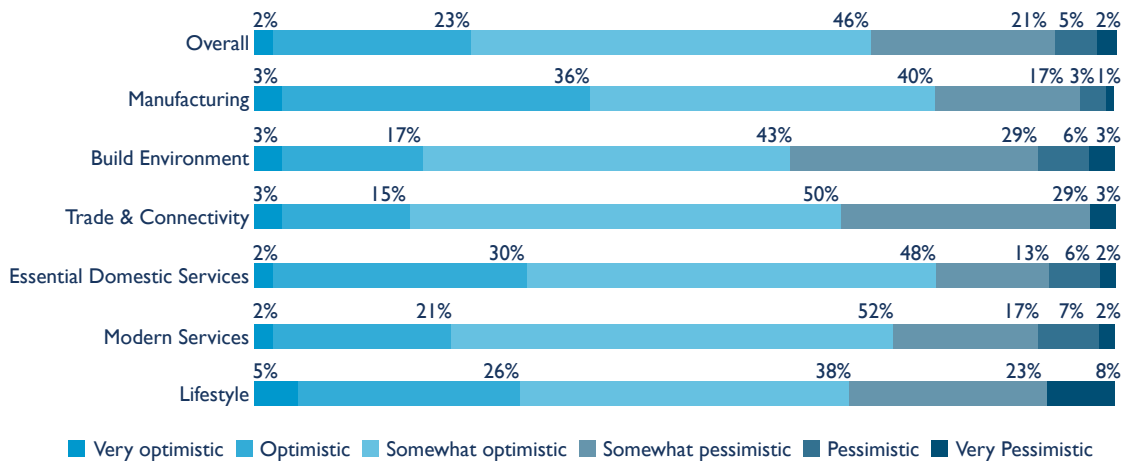
Figures are rounded to the nearest whole number.

Employees working in **Essential Domestic Services (80%)** are currently the most optimistic about the Singapore job market, followed by those in the **Manufacturing (79%)** and **Modern Services (75%)**. This is in contrast to 2020's results, whereby employees working in **Built Environment (34%)** and **Modern services (40%)** were the least optimistic about the job market. While only 48% of employees in **Essential Domestic Services** held an optimistic outlook about the job market in 2020.

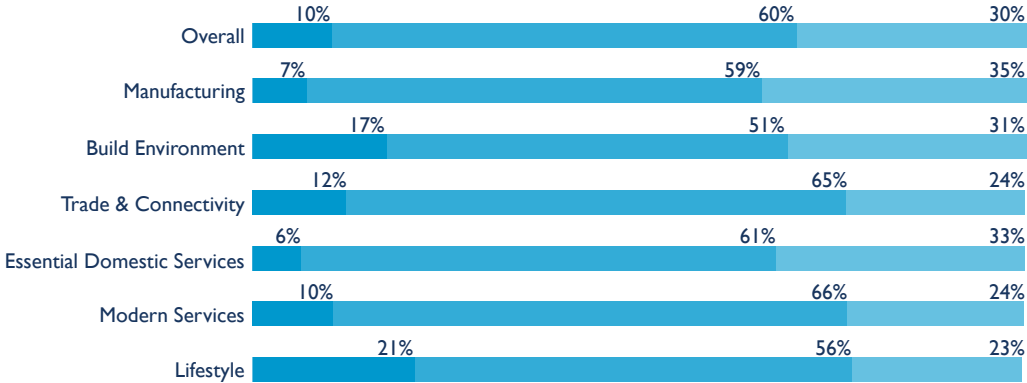# While the proportion of those seeking new employement remain stable, employees are more confident of securing jobs.

70% of **employees** indicate that they are either **actively job-hunting** or **open to a new job**.

> Similarly, 70% of employees were either actively looking or open to a new job in 2020.

	Actively job-hunting	Open but not actively job-hunting	Not looking for a new job
Overall	10%	60%	30%
Manufacturing	7%	59%	35%
Build Environment	17%	51%	31%
Trade & Connectivity	12%	65%	24%
Essential Domestic Services	6%	61%	33%
Modern Services	10%	66%	24%
Lifestyle	21%	56%	23%

■ Actively job-hunting   ■ Open but not actively job-hunting   ■ Not looking for a new job

Figures are rounded to the nearest whole number.

> Employees in **Lifestyle (77%)** are the most likely to look for a new job, followed by those in **Trade & Connectivity and Modern Services (76%)**. On the other hand, employees working in **Manufacturing (65%)** are the least likely to look for new employment.

TOP FIVE REASONS FOR LOOKING FOR A JOB
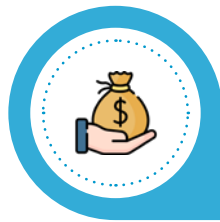
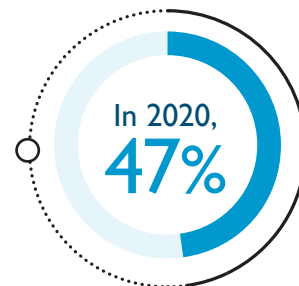| Reason	
Better pay	**61%**
Better career progression opportunities	**45%**
Looking to explore new roles	**44%**
Looking to explore new industry	**35%**
Lack of growth in current job	**32%**

TOP THREE REASONS FOR REMAINING IN THEIR CURRENT ROLE

60%
Satisfied with current role

33%
Satisfied with current pay

24%
Current company provides job security

In 2021, **63%**

In 2020, **47%**
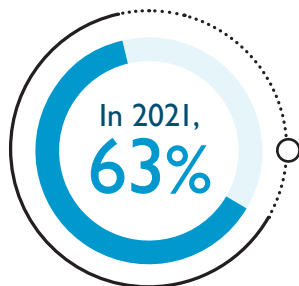
of **employees** are either **'very confident', 'confident' or 'somewhat confident'** about their **ability to find a job** that matches their needs.
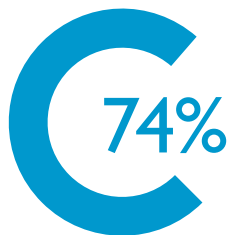
74% of **employees** are confident to land a new job **within six months**, as compared to 2020 (71%).

	Very confident	Confident	Somewhat confident	Not really confident	Not confident at all
Overall	3%	23%	37%	31%	6%
Manufacturing	1%	25%	35%	31%	8%
Build Environment	9%	17%	29%		46%
Trade & Connectivity	3%	29%	38%	15%	15%
Essential Domestic Services	4%	31%	33%	28%	4%
Modern Services	2%	19%	44%	30%	4%
Lifestyle	3%	26%	38%	28%	5%
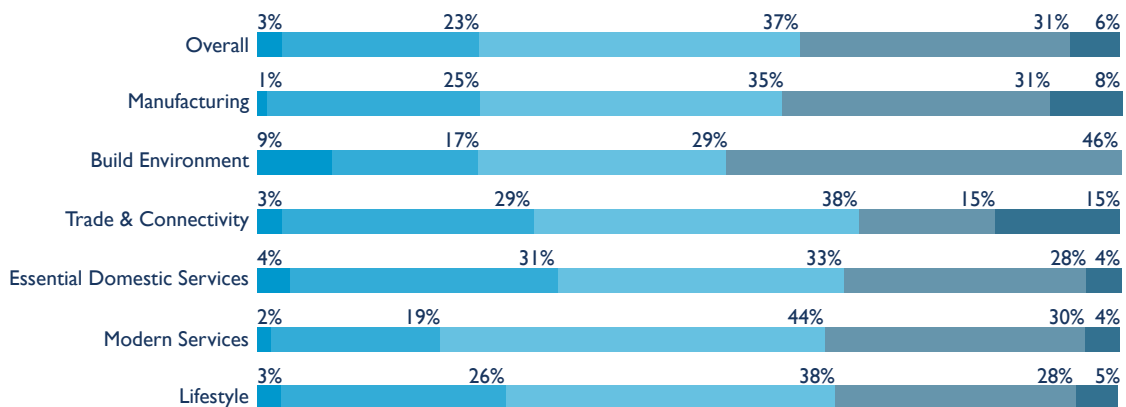
■ Very confident ■ Confident ■ Somewhat confident ■ Not really confident ■ Not confident at all

Figures are rounded to the nearest whole number.

Employees in **Trade & Connectivity (70%)** are the most likely to feel confident about their ability to land a job, followed by those in **Essential Domestic Services (68%)**. However, employees working in the **Built Environment** industry are the least optimistic about their ability to secure new employment opportunities, where only **54%** say so.

Employees are most keen to explore roles in Data Management.

In order to stay relevant in the next two years, employees reveal that there is a need to upgrade their skills to take on jobs in Data Management (52%), Digital Marketing (46%) and Leadership & Management (40%).

TOP TEN DATA SCIENCE JOB ROLES ACCORDING TO EMPLOYEES

Role	%
Data Management	52%
Data Analysis	52%
Data Visualisation	34%
Artificial Intelligence	32%
Statistical Programming	30%
Machine Learning	30%
Data Modelling	29%
Probability & Statistics	29%
Business Intelligence Analysis	28%
Data Mining	24%
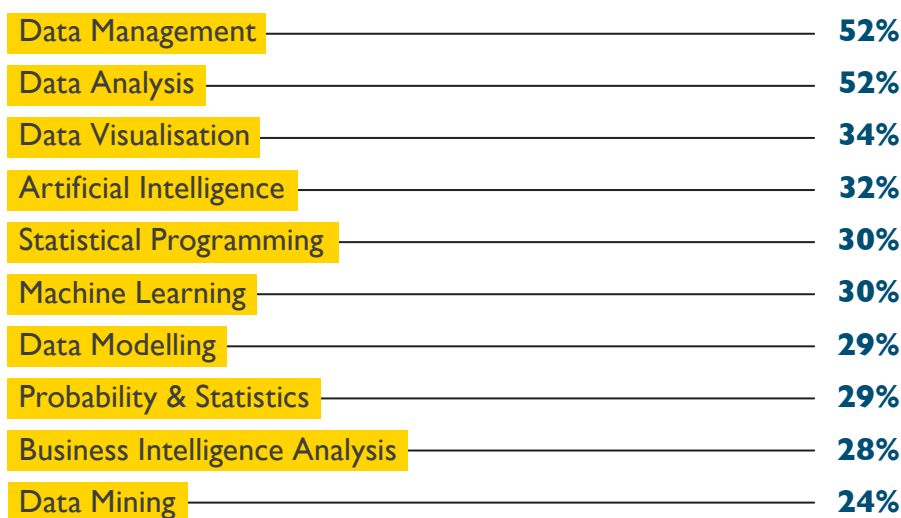
TOP TEN MARKETING JOB ROLES ACCORDING TO EMPLOYEES

Role	%
Digital Marketing	46%
Digital Strategy	42%
Social Media Marketing	36%
Brand Management	27%
Public Relations	26%
Content Marketing	24%
Product Marketing	22%
Media Planning	20%
Digital Community Management	14%
Community Management	13%

TOP TEN BUSINESS AND SALES JOB ROLES ACCORDING TO EMPLOYEES

Role	%
Leadership & Management	40%
Strategy & Operations	36%
Management & Organisation Analysis	33%
Business Development	28%
Finance	27%
E-Commerce	25%
Market Research	24%
Sales	22%
Management Consulting	17%
Customer Success	16%

Employees are most concerned with job displacement by technology.

Nearly **4** in 5 employees

say that **COVID-19 has brought about digital transformation** to either a **'large extent' or 'moderate extent'** in their current workplace.

TO ADAPT TO COVID-19, EMPLOYEES SHARE THAT THEIR COMPANY NEEDS TO FOCUS ON THE FOLLOWING STRATEGIES:
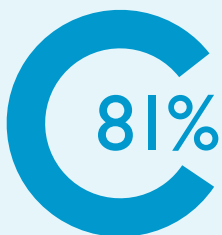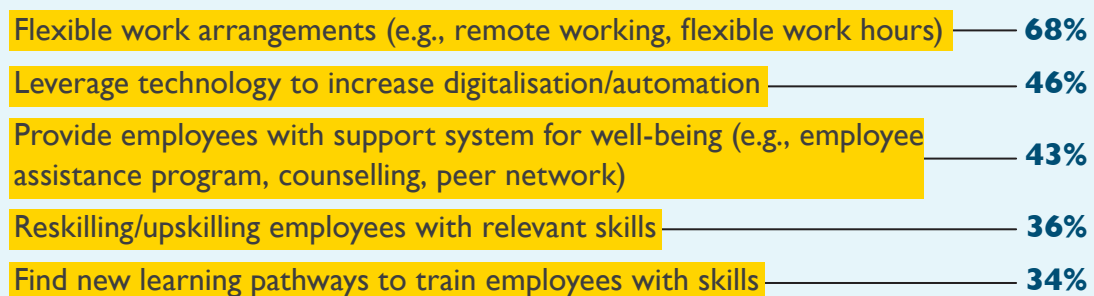
Strategy	%
Flexible work arrangements (e.g., remote working, flexible work hours)	68%
Leverage technology to increase digitalisation/automation	46%
Provide employees with support system for well-being (e.g., employee assistance program, counselling, peer network)	43%
Reskilling/upskilling employees with relevant skills	36%
Find new learning pathways to train employees with skills	34%

81% of **employees** are either **'very concerned'**, **'concerned' or 'somewhat concerned'** about the **impact of digitalisation on jobs** in their industry.

Overall: 10% | 37% | 34% | 16% | 3%

Manufacturing: 3% | 47% | 27% | 21% | 3%

Build Environment: 23% | 26% | 43% | 9%

Trade & Connectivity: 6% | 41% | 38% | 9% | 6%

Essential Domestic Services: 9% | 31% | 44% | 15%

Modern Services: 10% | 38% | 34% | 13% | 5%

Lifestyle: 18% | 33% | 33% | 13% | 3%

■ Very concerned ■ Concerned ■ Somewhat concerned ■ Not really concerned ■ Not concerned at all

Figures are rounded to the nearest whole number.
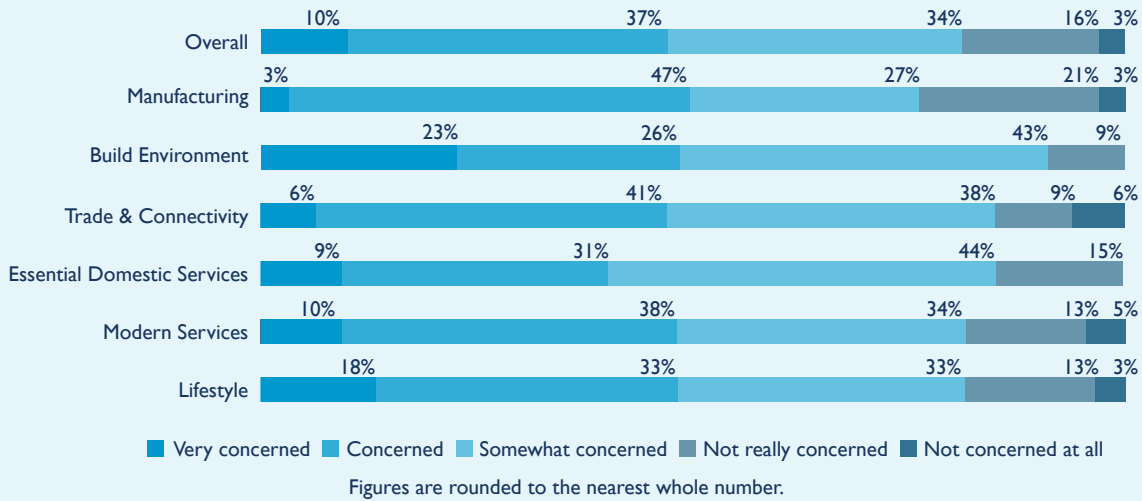
Employees working in **Built Environment (91%)** are most likely to feel concerned about the impact of digitalisation, whereas those working in **Manufacturing (76%)** are the least concerned.

While the majority believe that technology cannot entirely replace the role of humans in the workforce, about three in ten employees worry about their job security.

30% of **employees** fear that **digitalisation will render their role redundant** as tasks will be driven by artificial intelligence.

TOP FIVE CONCERNS ABOUT DIGITALISATION

There is a need to learn new skills to stay relevant — **46%**

Fear of not being able to adapt to new and complex skills — **40%**

Lack of support from the company in skills training — **34%**

Lack of agility from company in upgrading to new digital solutions — **33%**

Fear of being replaced due to the lack of skills — **31%**

ACCORDING TO EMPLOYEES, TECHNOLOGY ADOPTION...

Can only replace certain roles (e.g., highly manual, repetitive tasks) — **40%**

Cannot replace soft skills (e.g., communication, EQ) — **30%**

Leads to an overall decrease in jobs — **29%**

Cannot take on creative tasks — **24%**

Cannot replace decision making skills — **23%**

> Employees think that an average of **66%** of information and data processing tasks will be performed by technologies in the next two years.

RATIO OF WORK PERFORMED BY TECHNOLOGIES

Information and data processing	**66%**
Administrative work	**54%**
Performing physical and manual work activities	**51%**
Customer service	**45%**
Project management	**38%**
Communication and interaction	**37%**
Sales and business development	**36%**
Consulting / advising	**32%**
Reasoning and decision making	**31%**
People management	**30%**
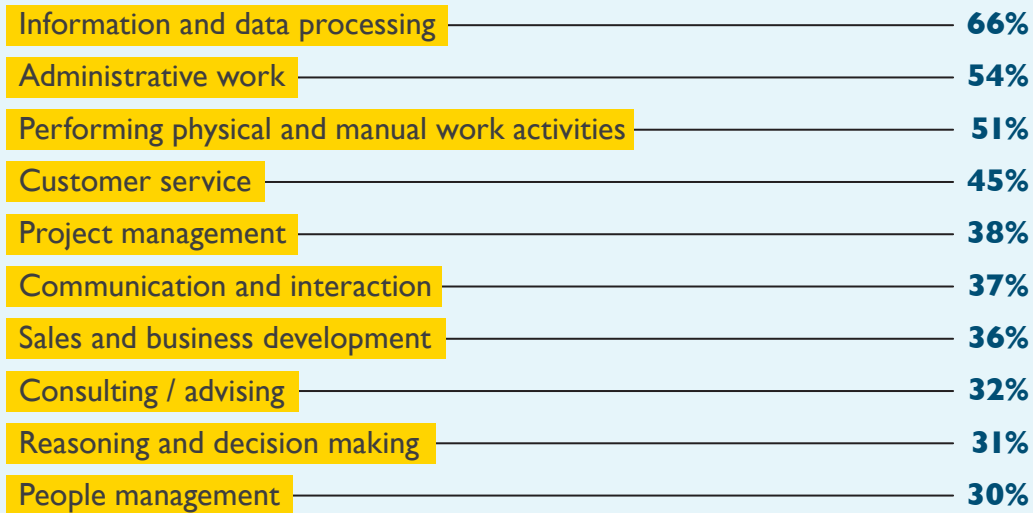
Employees are upgrading to remain resilient and relevant.

59% of **employees** say there is a **need to upgrade their skills** to move into a more resilient industry.

Healthcare remains the most appealing industry that employees are interested to move into after they have upskilled. In 2020, **Healthcare (31%)** was voted as the top industry employees are interested to enter, followed by **Biopharmaceuticals Manufacturing (23%)** and **Infocomm Technology (21%)**.

TOP FIVE INDUSTRIES EMPLOYEES ARE INTERESTED TO PIVOT INTO

24% Healthcare	23% Infocomm Technology	18% Environmental Services	17% Financial Services	17% Biopharmaceuticals Manufacturing

93% of **employees** either **'strongly agree', 'agree' or 'somewhat agree'** that there is a need to **upgrade their skills to keep themselves relevant** in their current role, as compared to 91% in 2020.

Overall	22%	47%	24%	4%	1% 1%
Manufacturing	24%	45%	25%	5%	
Build Environment	26%	34%	31%	9%	
Trade & Connectivity	12%	47%	35%	3%	3%
Essential Domestic Services	17%	54%	28%	2%	
Modern Services	26%	53%	16%	5%	1%
Lifestyle	23%	41%	28%	5%	3%

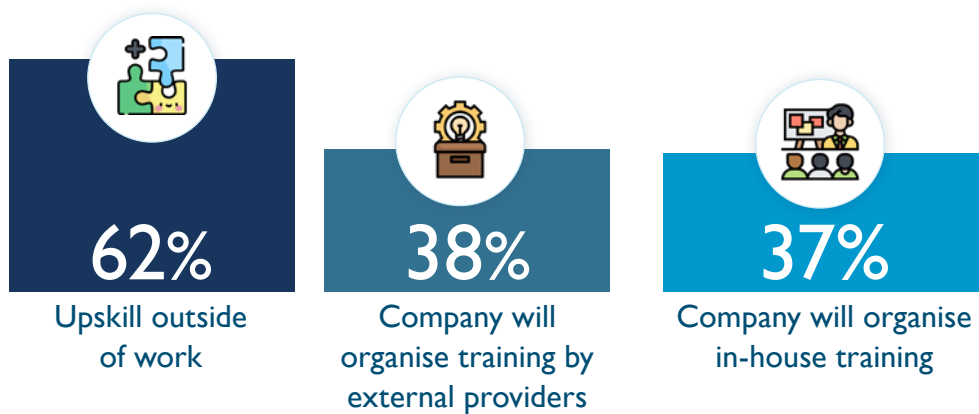■ Strongly agree ■ Agree ■ Somewhat agree ■ Somewhat disagree ■ Disagree ■ Strongly disagree
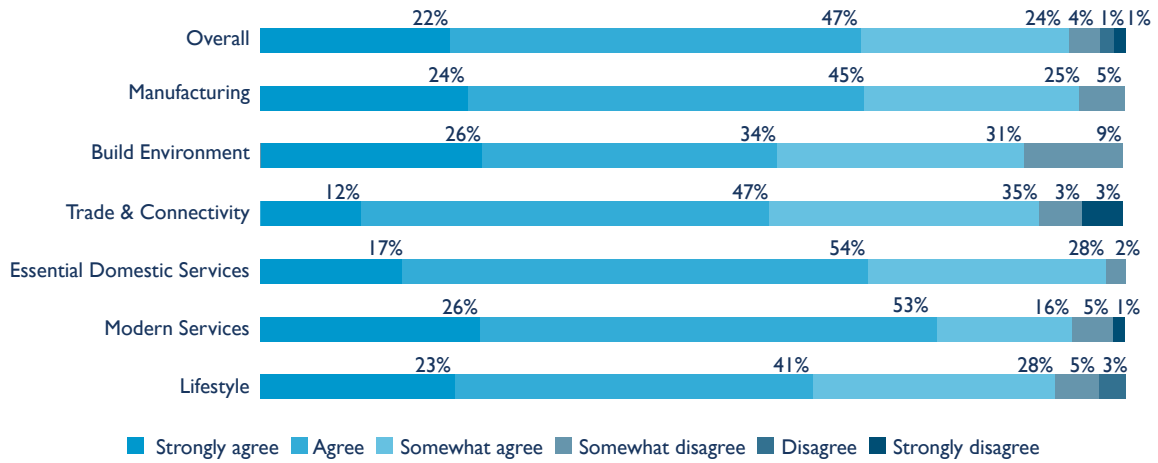
Figures are rounded to the nearest whole number.

Employees from **Essential Domestic Services (98%)** feel the strongest need to upskill in order to stay relevant in their current job. On the flip side, employees from **Built Environment (91%)** are the least likely to say so. This contrasts with 2020's results where employees from **Built Environment (96%)** felt the strongest need to upskill to remain relevant.

TOP FIVE REASONS FOR UPSKILLING

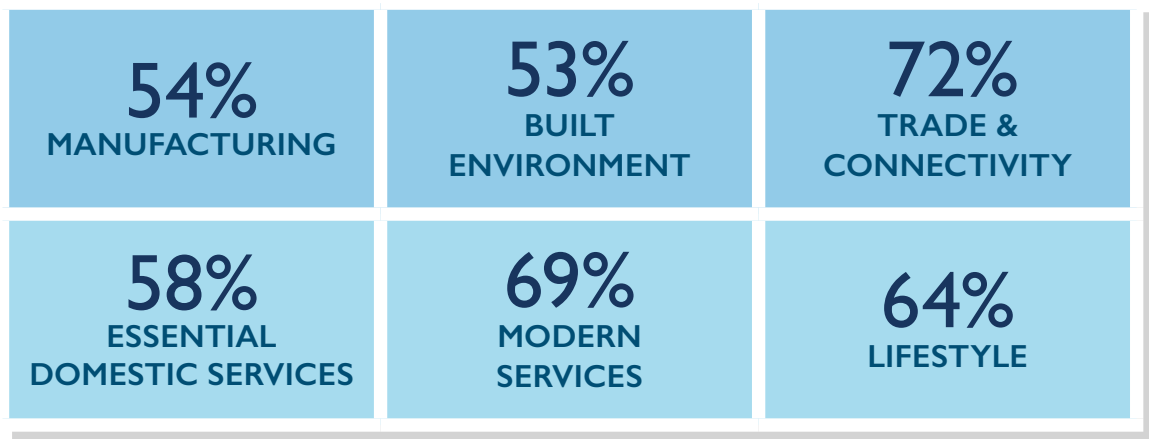|	
Better career progression opportunities	**66%**
Better pay	**58%**
Better match with skillsets	**50%**
Looking to explore new roles	**46%**
Fear of being laid off	**37%**

Most employees are **taking upskilling into their own hands** to keep themselves competitive in the job market in the next two years.
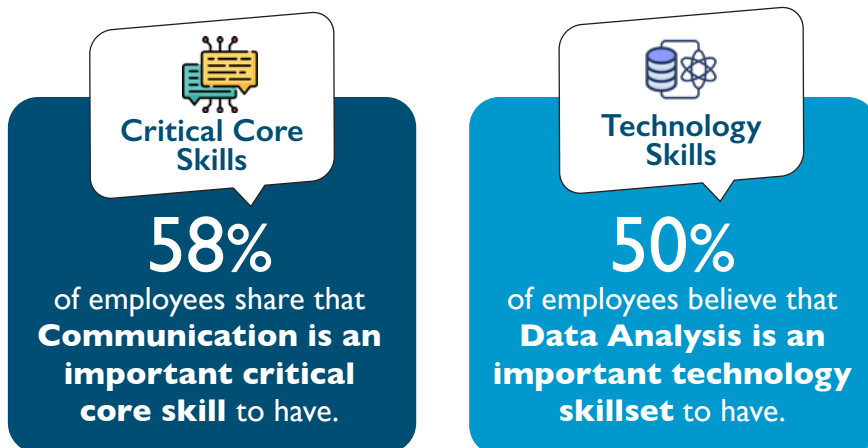
62%	38%	37%
Upskill outside of work	Company will organise training by external providers	Company will organise in-house training

EMPLOYEES WHO UPSKILL OUTSIDE OF WORK ON THEIR OWN ACCORD:

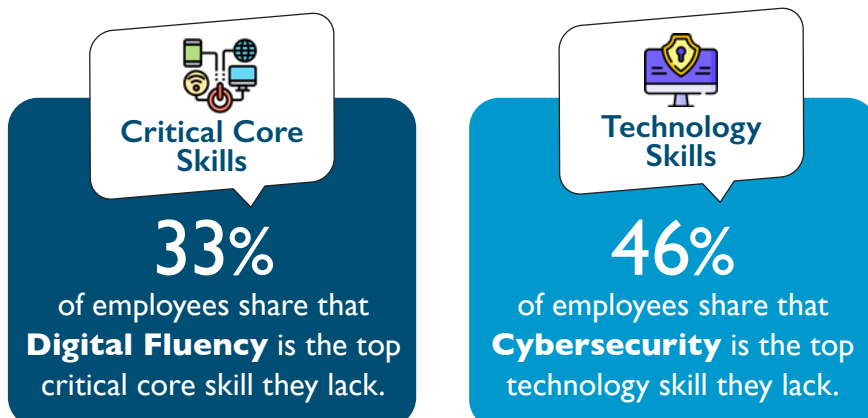|		
54% MANUFACTURING	**53%** BUILT ENVIRONMENT	**72%** TRADE & CONNECTIVITY
58% ESSENTIAL DOMESTIC SERVICES	**69%** MODERN SERVICES	**64%** LIFESTYLE

Employees from **Trade & Connectivity (72%)** are most likely to arrange for skills training on their own, whereas those working in **Built Environment (53%)** are the least likely to say so.

Overall, Communication is the most important competency to hone, whereas Cybersecurity is a skill which most employees lack.

TOP SKILLS EMPLOYEES DEEM IMPORTANT TO HAVE

Critical Core Skills

58%
of employees share that **Communication is an important critical core skill** to have.

Technology Skills

50%
of employees believe that **Data Analysis is an important technology skillset** to have.

TOP SKILLS EMPLOYEES ARE LACKING IN

Critical Core Skills

33%
of employees share that **Digital Fluency** is the top critical core skill they lack.

Technology Skills

46%
of employees share that **Cybersecurity** is the top technology skill they lack.
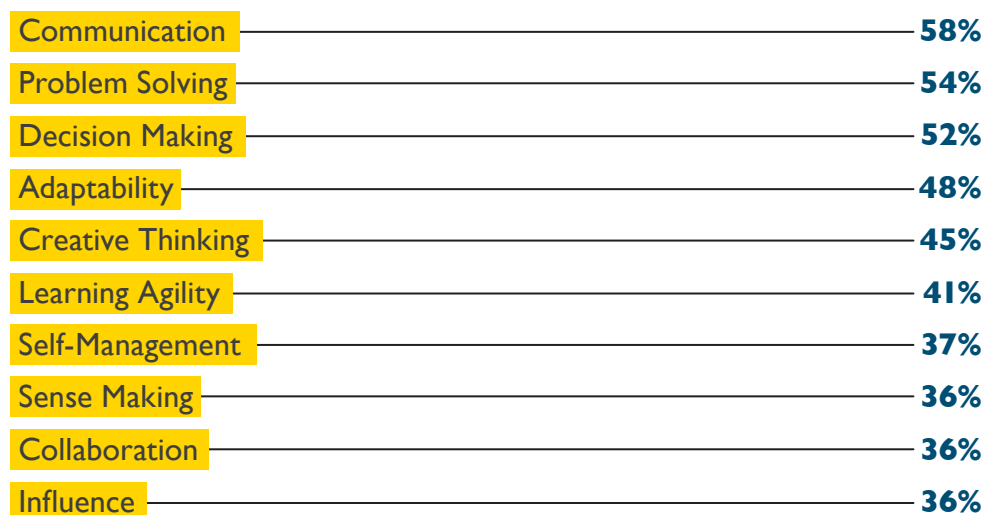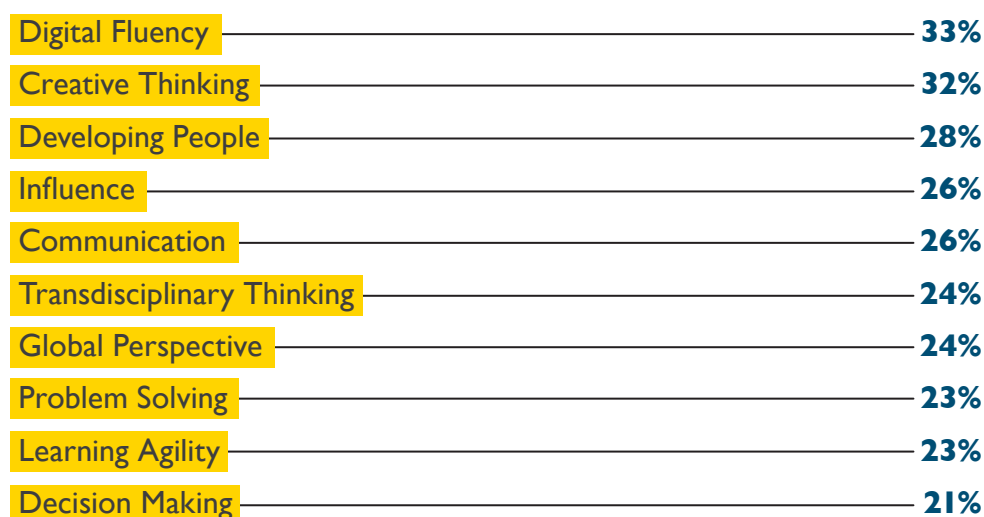
Critical Core Skills

The Critical Core Skills is a new framework by SkillsFuture Singapore which identifies 16 adaptive and transferable competencies to help workers focus on upskilling beyond their technical roles[3]. Similar to the findings uncovered last year, Communication remains as the top skill which employees deem important to acquire.

TOP TEN CRITICAL CORE SKILLS EMPLOYEES BELIEVE ARE IMPORTANT TO HAVE

Skill	Percentage
Communication	58%
Problem Solving	54%
Decision Making	52%
Adaptability	48%
Creative Thinking	45%
Learning Agility	41%
Self-Management	37%
Sense Making	36%
Collaboration	36%
Influence	36%

Consistent with last year's findings, Creative Thinking continues to be among the top skills which employees say they are lacking in. However, many employees find that they lack Digital Fluency this year. This is potentially due to the rapid technological advancements which have taken place as a result of coping with an endemic era.

TOP TEN CRITICAL CORE SKILLS EMPLOYEES LACK

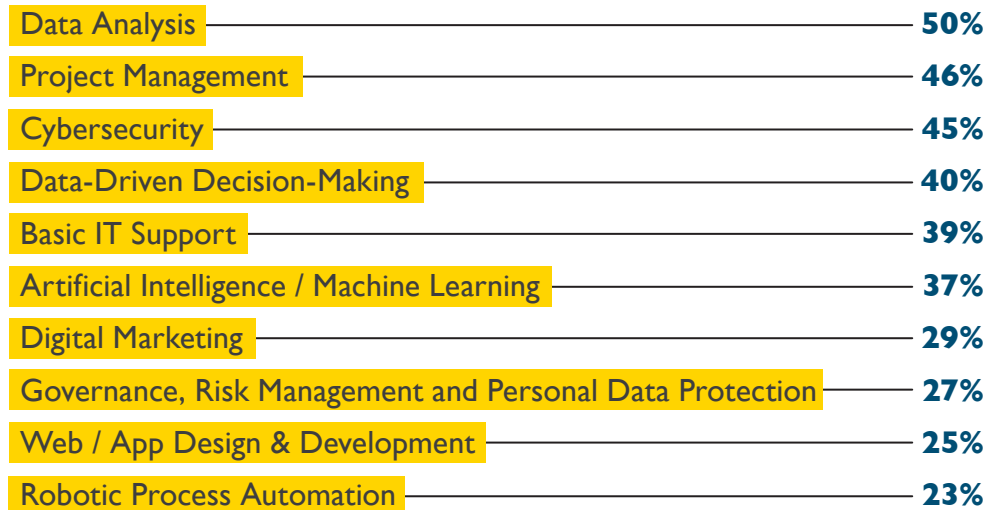| Skill	Percentage
Digital Fluency	33%
Creative Thinking	32%
Developing People	28%
Influence	26%
Communication	26%
Transdisciplinary Thinking	24%
Global Perspective	24%
Problem Solving	23%
Learning Agility	23%
Decision Making	21%

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3 **SkillsFuture Singapore. 2021.** Skills Demand for the Future Economy. [Accessed 14 December 2021].
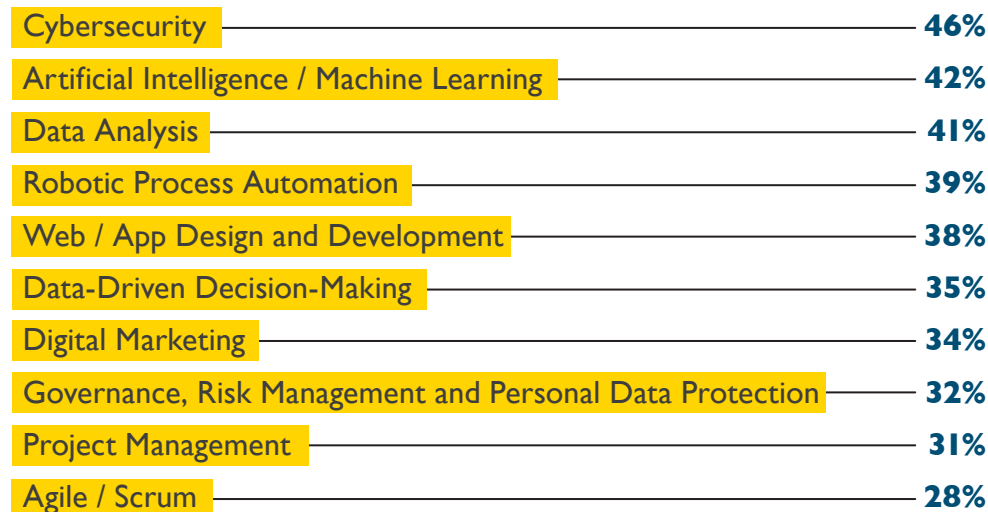
Technology Skills

In 2020, employees voted Data Analysis, Project Management and Data-Driven Decision-Making skills as the most important technology skillset to have. However, Cybersecurity has emerged among the top three technology skills which employees deem important this year.

TOP TEN TECHNOLOGY SKILLS EMPLOYEES BELIEVE ARE IMPORTANT TO HAVE

Skill	%
Data Analysis	50%
Project Management	46%
Cybersecurity	45%
Data-Driven Decision-Making	40%
Basic IT Support	39%
Artificial Intelligence / Machine Learning	37%
Digital Marketing	29%
Governance, Risk Management and Personal Data Protection	27%
Web / App Design & Development	25%
Robotic Process Automation	23%

When compared to 2020's survey, Cybersecurity, Artificial Intelligence / Machine Learning and Data Analysis remain the top technology skills which employees believe they lack in.

TOP TEN TECHNOLOGY SKILLS EMPLOYEES LACK

Skill	%
Cybersecurity	46%
Artificial Intelligence / Machine Learning	42%
Data Analysis	41%
Robotic Process Automation	39%
Web / App Design and Development	38%
Data-Driven Decision-Making	35%
Digital Marketing	34%
Governance, Risk Management and Personal Data Protection	32%
Project Management	31%
Agile / Scrum	28%

Employees need clarity and guidance from their employers for skills development.
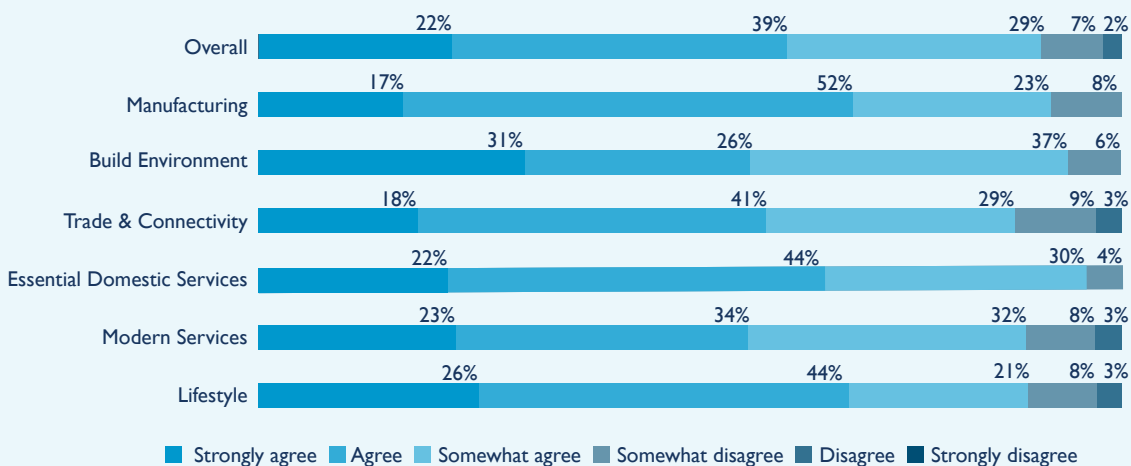
Employees are generally satisfied with skills training programmes offered by their company – however, **a majority of employees are only 'somewhat satisfied'.**
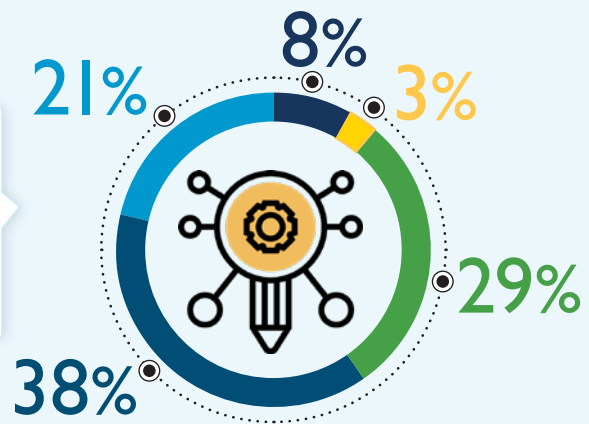
8%

21%

3%

29%

38%

- ■ Very satisfied
- ■ Satisfied
- ■ Somewhat satisfied
- ■ Not really satisfied
- ■ Not satisfied at all

In 2021, **90%**

In 2020, **71%**

of **employees** wish their company could **provide more support** to help with their skills upgrading.

	Strongly agree	Agree	Somewhat agree	Somewhat disagree	Disagree	Strongly disagree
Overall	22%	39%	29%	7%	2%	
Manufacturing	17%	52%	23%	8%		
Build Environment	31%	26%	37%	6%		
Trade & Connectivity	18%	41%	29%	9%	3%	
Essential Domestic Services	22%	44%	30%	4%		
Modern Services	23%	34%	32%	8%	3%	
Lifestyle	26%	44%	21%	8%	3%	

- ■ Strongly agree
- ■ Agree
- ■ Somewhat agree
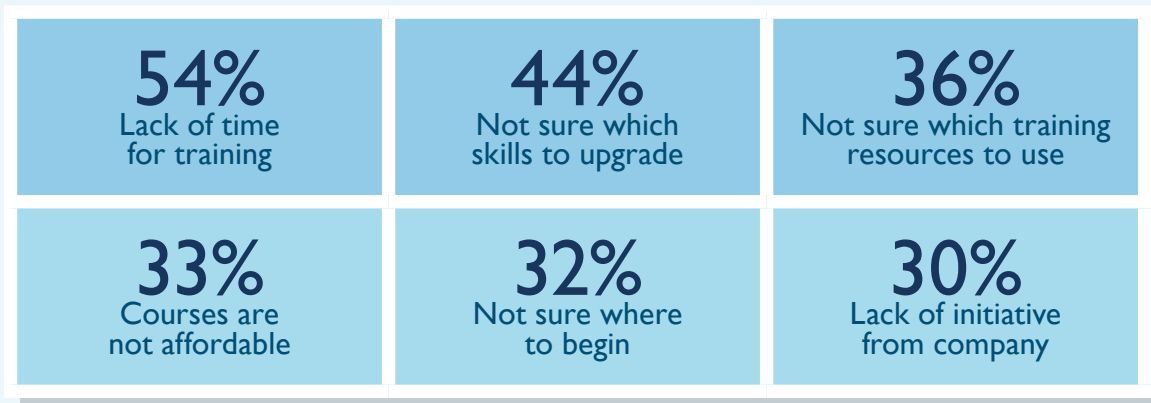- ■ Somewhat disagree
- ■ Disagree
- ■ Strongly disagree

Figures are rounded to the nearest whole number.

Employees working in **Built Environment (31%)** 'strongly agree' that their company should provide more support to aid in skills upgrading.
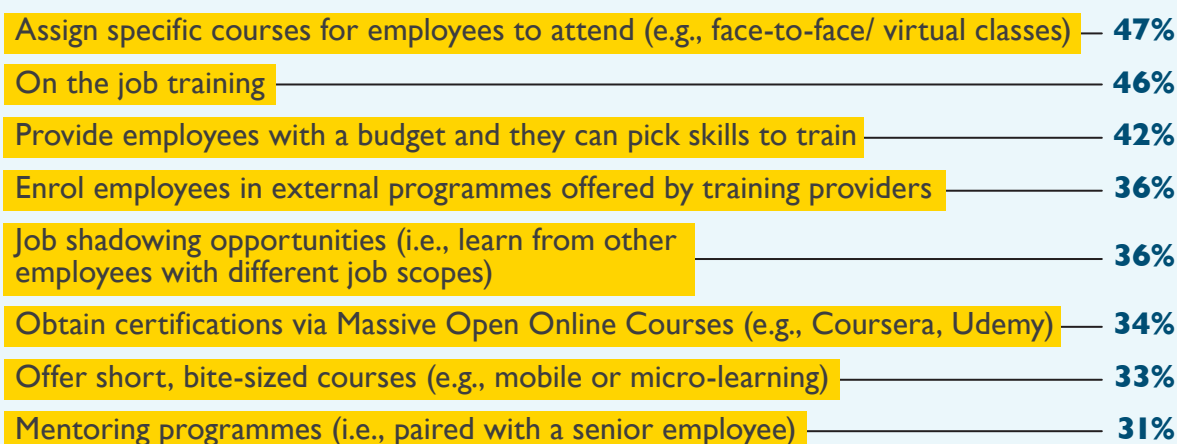
More than 1/3 of employees

36% report that their company should focus on **reskilling and upskilling employees with relevant skills.**

34% say that their company needs to focus on finding **new learning pathways to train employees with skills**.

34% are concerned about the **'lack of support from their company in skills training'** amidst digital transformation.
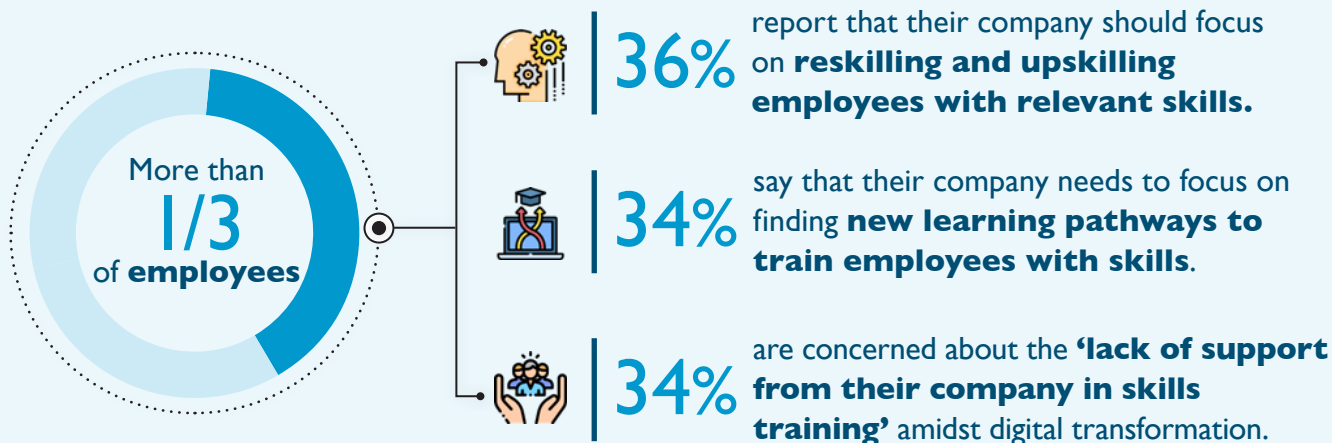
> The lack of guidance is a recurrent notion underlying the obstacles that employees face when upskilling.

TOP OBSTACLES EMPLOYEES FACE WHEN UPSKILLING

54% Lack of time for training	**44%** Not sure which skills to upgrade	**36%** Not sure which training resources to use
33% Courses are not affordable	**32%** Not sure where to begin	**30%** Lack of initiative from company

TOP EIGHT TRAINING OPPORTUNITIES DESIRED BY EMPLOYEES

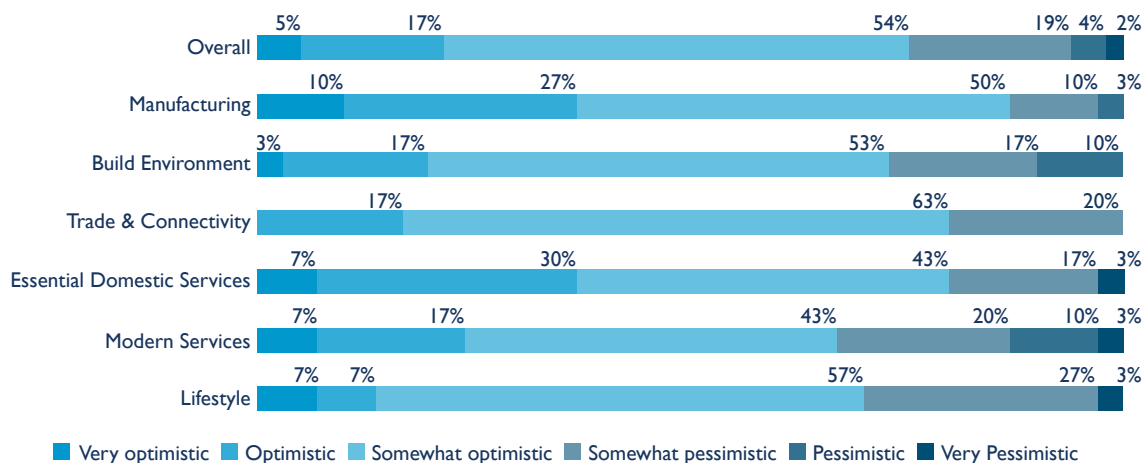|	
Assign specific courses for employees to attend (e.g., face-to-face/ virtual classes)	**47%**
On the job training	**46%**
Provide employees with a budget and they can pick skills to train	**42%**
Enrol employees in external programmes offered by training providers	**36%**
Job shadowing opportunities (i.e., learn from other employees with different job scopes)	**36%**
Obtain certifications via Massive Open Online Courses (e.g., Coursera, Udemy)	**34%**
Offer short, bite-sized courses (e.g., mobile or micro-learning)	**33%**
Mentoring programmes (i.e., paired with a senior employee)	**31%**

EMPLOYERS' GENERAL OUTLOOK

Employers are twice as optimistic about Singapore's job market as compared to 2020, with many intending to hire more.

In 2021, **76%**

In 2020, **39%**

of **employers** are either **'very optimistic', 'optimistic'** or **'somewhat optimistic'** about the Singapore job market right now.

	Very optimistic	Optimistic	Somewhat optimistic	Somewhat pessimistic	Pessimistic	Very Pessimistic
Overall	5%	17%	54%	19%	4%	2%
Manufacturing	10%	27%	50%	10%	3%	
Build Environment	3%	17%	53%	17%	10%	
Trade & Connectivity		17%	63%	20%		
Essential Domestic Services	7%	30%	43%	17%	3%	
Modern Services	7%	17%	43%	20%	10%	3%
Lifestyle	7%	7%	57%	27%	3%	

■ Very optimistic   ■ Optimistic   ■ Somewhat optimistic   ■ Somewhat pessimistic   ■ Pessimistic   ■ Very Pessimistic

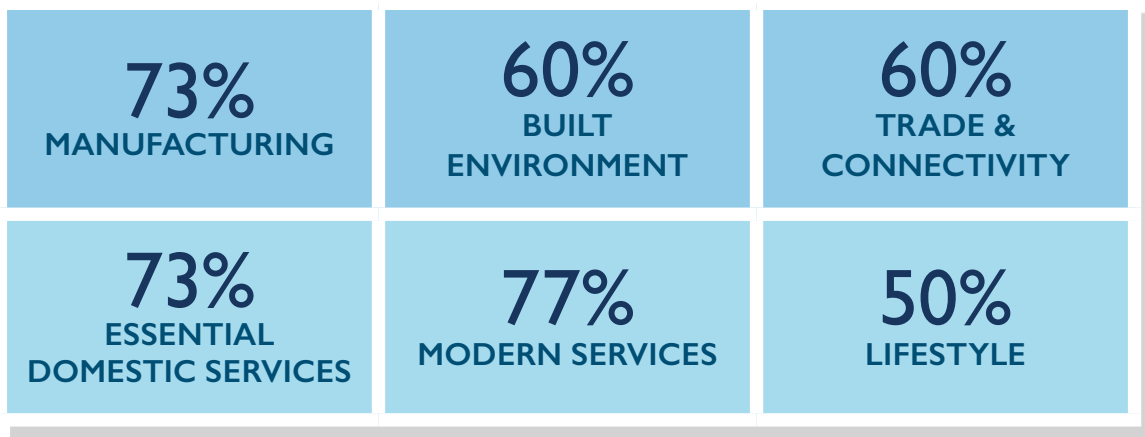Figures are rounded to the nearest whole number.

Employers in **Manufacturing (87%)** are the most optimistic about the Singapore job market, followed by those in **Trade & Connectivity** and **Essential Domestic Services (80%)**. However, employers in **Modern Services (67%)** are the least optimistic about the job market.

In 2021, 65%

In 2020, 56%

of **employers have been hiring or intending to hire** new talent to meet their company's current business goals.

Employers are keen to hire more talent to meet their company's business goals as compared to the previous year. While many employers are actively hiring, there is some hesitation on the part of employees – as the bulk of employees indicate that they are **open to, but not actively job hunting (60%).**

EMPLOYERS WHO HAVE BEEN HIRING OR INTENDING TO HIRE NEW TALENT:

73% MANUFACTURING	**60%** BUILT ENVIRONMENT	**60%** TRADE & CONNECTIVITY
73% ESSENTIAL DOMESTIC SERVICES	**77%** MODERN SERVICES	**50%** LIFESTYLE

Employers in **Modern Services (77%)** are the most likely to hire new talent to meet their company's current business goals. Although **employers in Lifestyle (50%)** are the least likely to hire new talent, **employees in Lifestyle (77%)** are the most likely to look for a new job.

TOP FIVE DEPARTMENTS WHERE EMPLOYERS ARE INTENDING TO HIRE

55%
IT & Digital

43%
Business Operations

35%
Leadership & Management

34%
Product Development
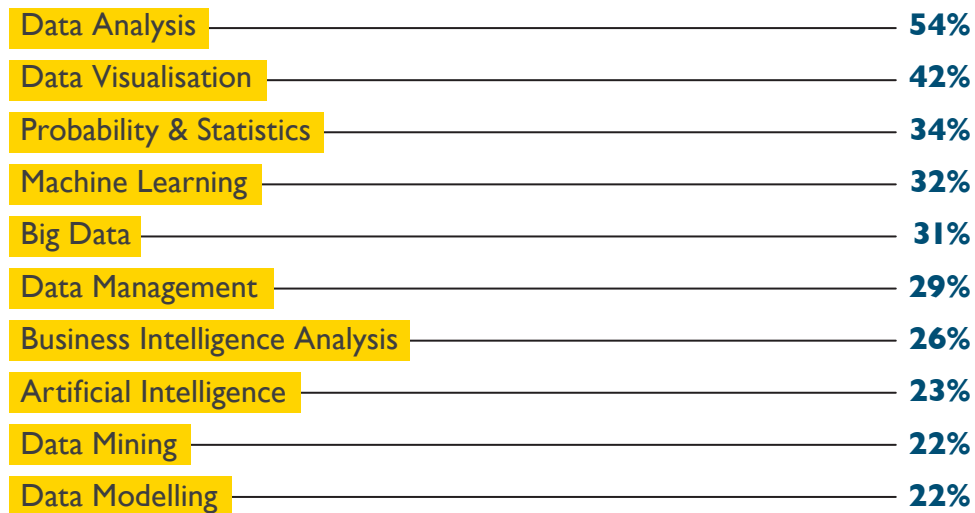
32%
Human Resources

Overall, employers are more willing to hire across departments compared to the previous year. The 2020 survey found that employers were more likely to hire candidates for IT & Digital (45%), Business Operations (39%), Leadership & Management (26%), Product Development (27%) and Human Resources (17%) departments.

Data Analysis, Digital Marketing and Strategy & Operations are among the top job roles that employers are looking to hire for.

According to employers, **Data Analysis (54%)** and **Data Visualisation (42%)** are the top job roles their organisation is looking to fill. Similarly, **Data Analysis (52%)** and **Data Visualisation (34%)** are among the top three data science jobs which employees are looking to enter.
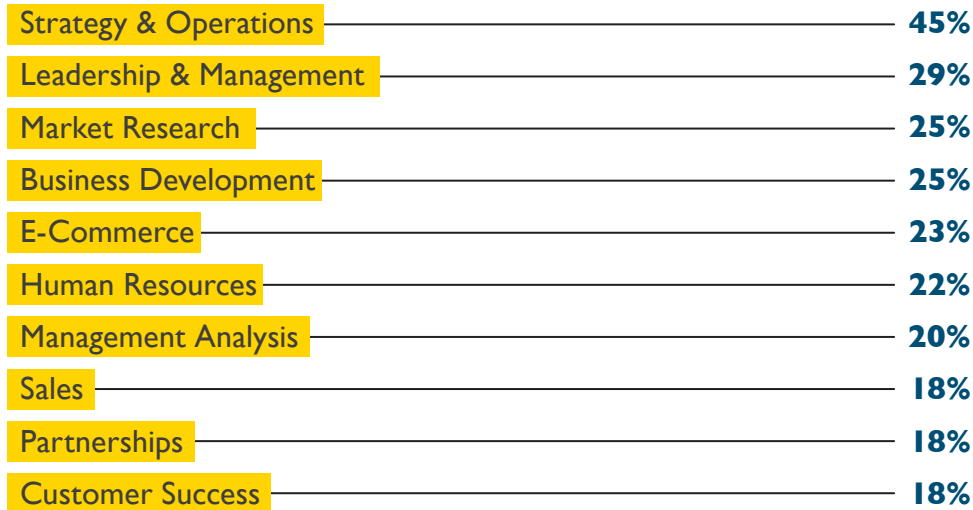
TOP TEN DATA SCIENCE JOB ROLES WHICH EMPLOYERS ARE HIRING FOR

Job Role	Percentage
Data Analysis	54%
Data Visualisation	42%
Probability & Statistics	34%
Machine Learning	32%
Big Data	31%
Data Management	29%
Business Intelligence Analysis	26%
Artificial Intelligence	23%
Data Mining	22%
Data Modelling	22%

Employers' hiring sentiments towards marketing job roles are consistent with that of employees. Employees are similarly most willing to upgrade their skills to pursue job roles in **Digital Marketing (46%)**, **Digital Strategy (42%)** and **Social Media Marketing (36%)**.

TOP TEN MARKETING JOB ROLES WHICH EMPLOYERS ARE HIRING FOR

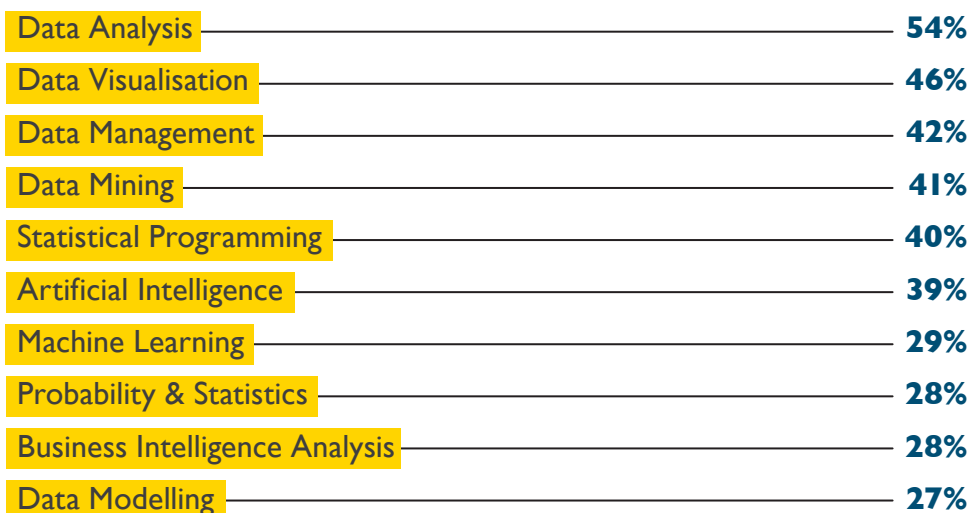| Job Role	Percentage
Digital Marketing	45%
Digital Strategy	41%
Social Media Marketing	32%
Public Relations	30%
Product Marketing	29%
Content Marketing	26%
Brand Management	26%
Digital Community Management	25%
Account Management	20%
Media Planning	18%

Strategy & Operations (45%) is top role employers are looking to fill, followed by **Leadership & Management (29%)**. To a similar extent, employees also indicate that **Leadership & Management (40%)** and **Strategy & Operations (36%)** are the top business and sales jobs which they are most keen to explore.

TOP TEN BUSINESS AND SALES JOB JOLES WHICH EMPLOYERS ARE HIRING FOR

Role	%
Strategy & Operations	45%
Leadership & Management	29%
Market Research	25%
Business Development	25%
E-Commerce	23%
Human Resources	22%
Management Analysis	20%
Sales	18%
Partnerships	18%
Customer Success	18%

Consistent with the hiring sentiments, jobs in Data Analysis, Digital Marketing and Strategy & Operations are instrumental roles for achieving business outcomes.

TOP TEN DATA SCIENCE JOB ROLES WHICH EMPLOYERS DEEM IMPORTANT

Role	%
Data Analysis	54%
Data Visualisation	46%
Data Management	42%
Data Mining	41%
Statistical Programming	40%
Artificial Intelligence	39%
Machine Learning	29%
Probability & Statistics	28%
Business Intelligence Analysis	28%
Data Modelling	27%

TOP TEN MARKETING JOB ROLES WHICH EMPLOYERS DEEM IMPORTANT

Role	Percentage
Digital Marketing	56%
Social Media Marketing	51%
Brand Management	48%
Digital Strategy	47%
Content Marketing	36%
Public Relations	32%
Product Marketing	32%
Media Planning	30%
Digital Community Management	24%
Community Management	19%

TOP TEN BUSINESS AND SALES JOB ROLES WHICH EMPLOYERS DEEM IMPORTANT

Role	Percentage
Strategy & Operations	51%
Leadership & Management	45%
Business Development	35%
Management Analysis	32%
E-Commerce	32%
Market Research	32%
Human Resources	27%
Customer Success	27%
Management & Organisation Analysis	26%
Sales	26%

Adaptability and Data Analysis skills are the top competencies coveted by employers.

TOP SKILLS EMPLOYERS ARE LOOKING TO HIRE

Critical Core Skills

52% of **employers** are hiring candidates with **Adaptability skills**.

Technology Skills

49% of **employers** are hiring candidates with skills in **Data Analysis**.
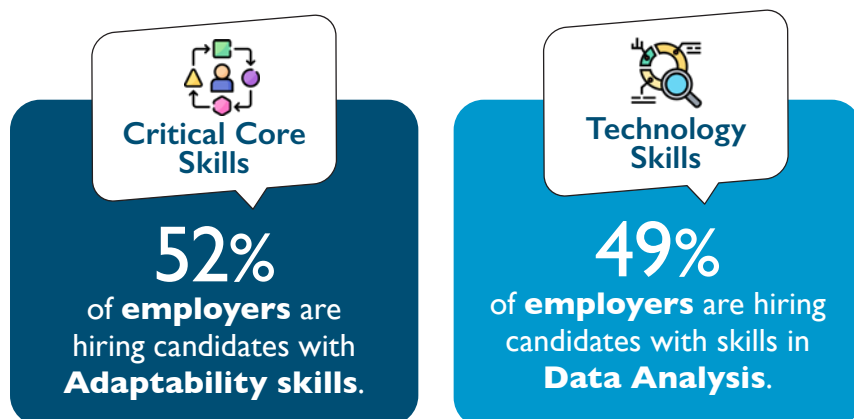
Adaptability (52%), Developing People (48%) and **Collaboration (44%)** are the top critical core skills employers look for when hiring candidates.

TOP TEN CRITICAL CORE SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Skill	%
Adaptability	52%
Developing People	48%
Collaboration	44%
Communication	43%
Creative Thinking	42%
Problem Solving	40%
Decision Making	37%
Learning Agility	36%
Digital Fluency	32%
Global Perspective	29%
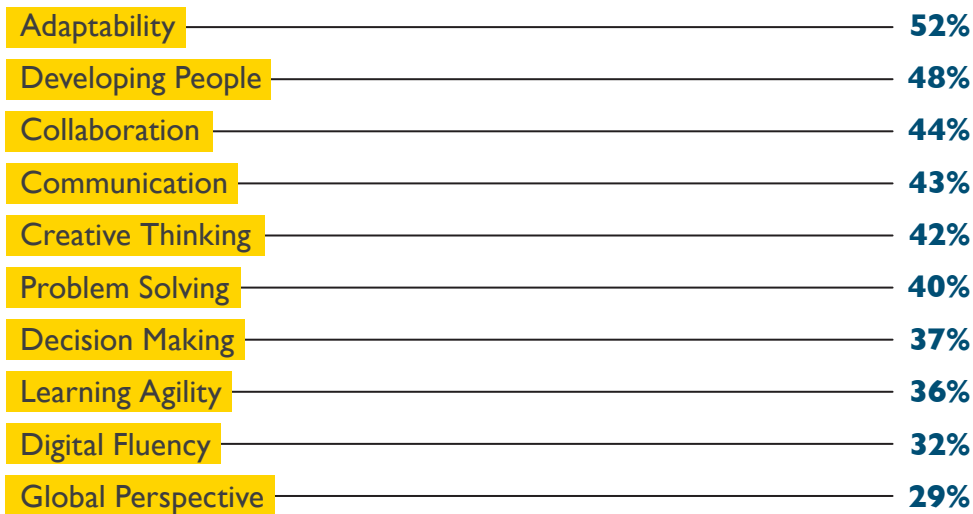
In 2020, employers revealed that the top three technology skills which their workforce lacked relates to **Digital Marketing, Data Analysis and Project Management skills**. This is consistent with the current finding as employers reveal that these competencies remain among the top five skills which their organisation is hiring for.

TOP TEN TECHNOLOGY SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Skill	%
Data Analysis	49%
Cybersecurity	45%
Digital Marketing	44%
Project Management	42%
Artificial Intelligence / Machine Learning	41%
Data-Driven Decision-Making	35%
Basic IT Support	30%
Governance, Risk Management and Personal Data Protection	28%
Web / App Design &Development	28%
Robotic Process Automation	24%
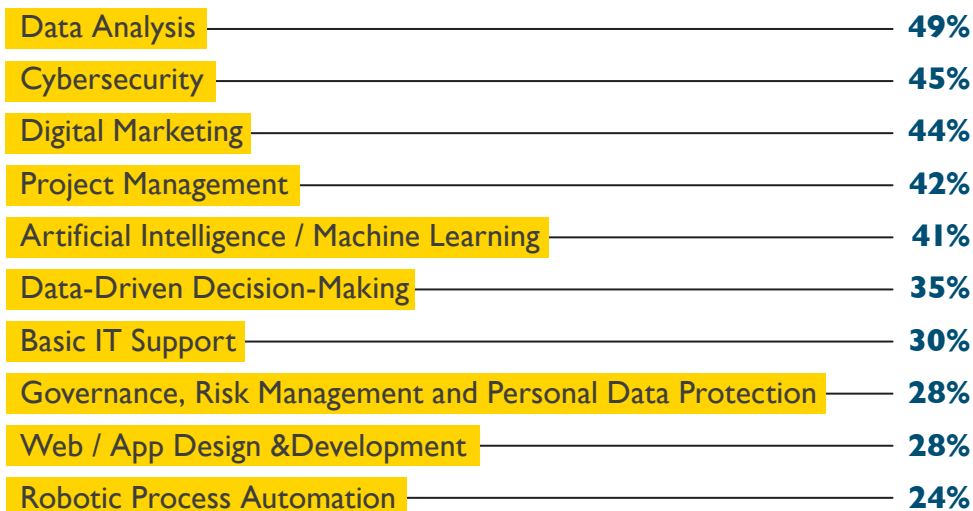
Employers anticipate greater digital transformation where technologies such as big data analytics will be adopted at the workplace.

85%

of **employers** say that **COVID-19 has brought about digital transformation to either a 'large extent' or 'moderate extent'** in their organisation.

92%

of **employers** indicate that their company will be increasing digitalisation to either a **'large extent' or 'some extent'** at work to achieve stronger business outcomes.
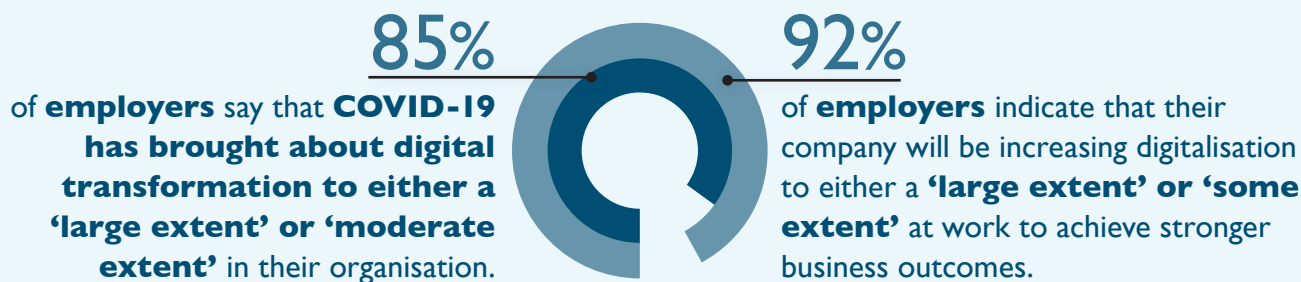
Although most employees (81%) are concerned about the impact of digital transformation on their jobs, employers anticipate that their organisation will likely **increase digitalisation** to achieve stronger business outcomes.

	Large extent	Some extent	Not at all	Not sure
Overall	24%	68%	6%	3%
Manufacturing	20%	77%		3%
Build Environment	20%	70%	10%	
Trade & Connectivity	37%	53%	7%	3%
Essential Domestic Services	23%	77%		
Modern Services	23%	73%		3%
Lifestyle	23%	57%	13%	7%

■ Large extent ■ Some extent ■ Not at all ■ Not sure
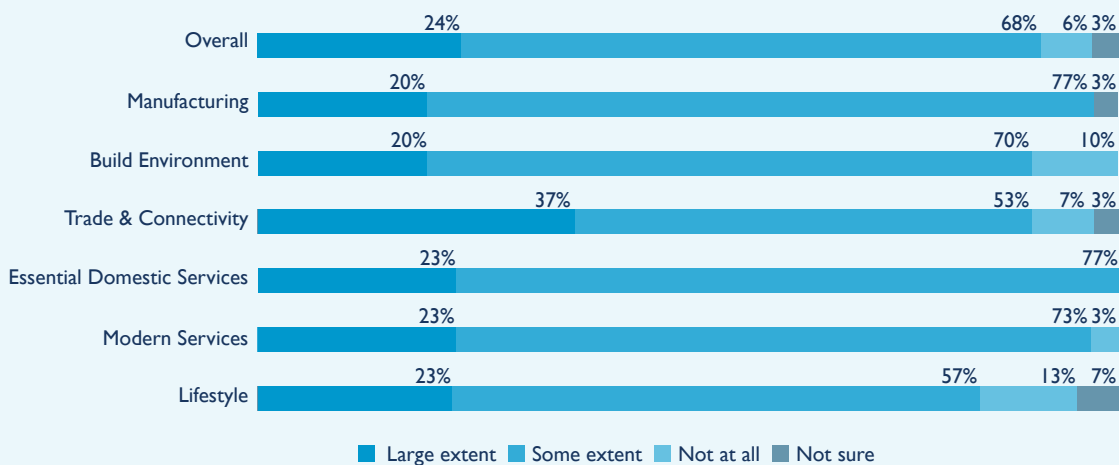
Figures are rounded to the nearest whole number.

Employers in **Essential Domestic Services** are in full agreement that digital transformation will be increased either to a **'large extent' (23%)** or **'some extent' (77%)**. Yet, employers in **Trade & Connectivity (37%)** are most likely to indicate that their organisation will be increasing digitalisation to a **'large extent'**.

TOP FIVE TECHNOLOGIES THAT EMPLOYERS BELIEVE WILL BE ADOPTED BY THEIR COMPANY

Big data analytics	**49%**
Internet of things and connected devices	**36%**
E-commerce and digital trade	**35%**
Artificial intelligence	**33%**
Cloud computing	**31%**
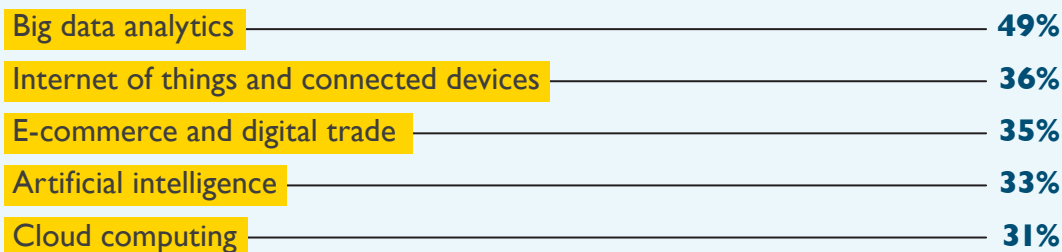
Employees and employers share a similar outlook about the proportion of tasks which will be performed by technologies in the next two years. Employees (66%) and employers (62%) expect that information and data processing tasks are likely to have the greatest portion of work performed by technologies. Additionally, both employers and employees believe that an average of 54% of administrative work and 51% of physical/manual work activities will be performed by technologies.
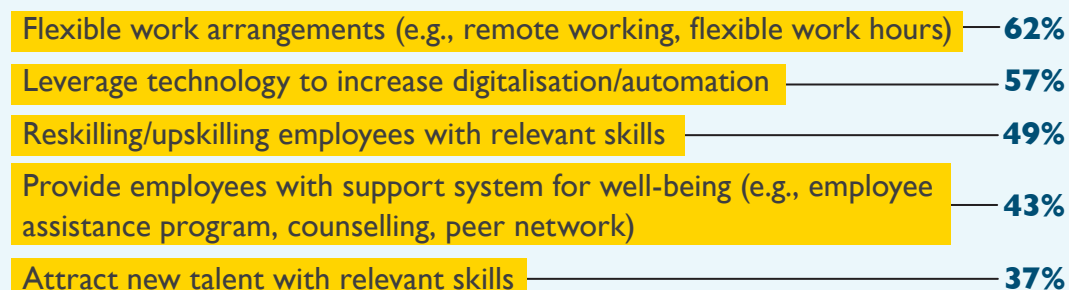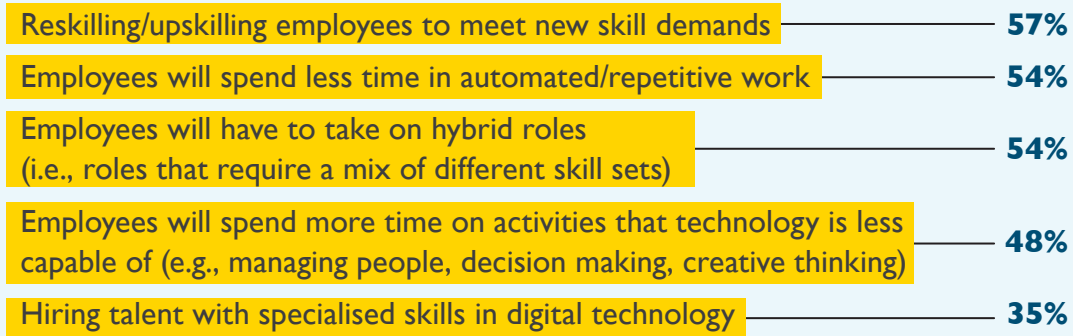
RATIO OF WORK PERFORMED BY TECHNOLOGIES

Information and data processing — **62%**

Administrative work — **54%**

Performing physical and manual work activities — **51%**

Customer service — **43%**

Project management — **37%**

Sales and business development — **37%**

Communication and interaction — **36%**

Reasoning and decision making — **33%**

Consulting/ advising — **31%**

People management — **28%**
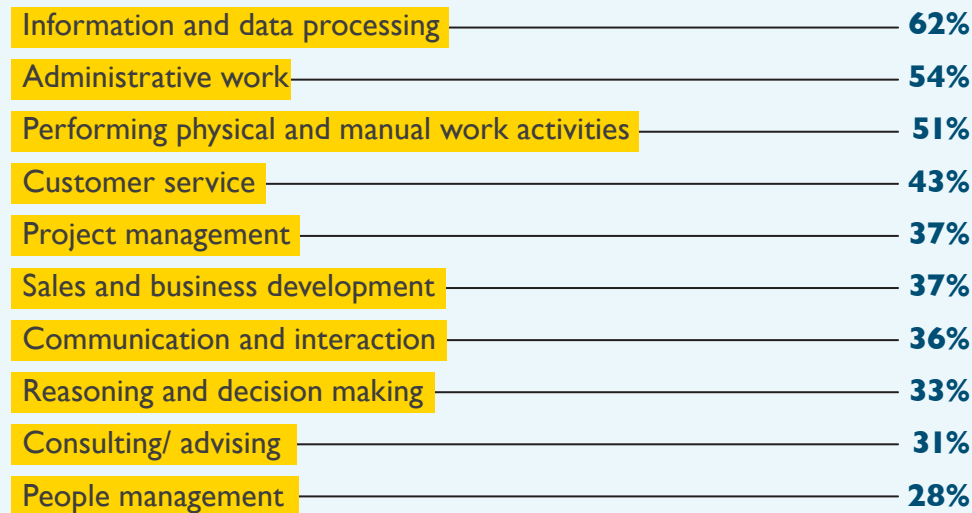
Greater emphasis on upskilling the workforce to keep pace with digital transformation.

While many employees fear that technology adoption could displace jobs, employers share an entirely different outlook. Employers believe that workforce upskilling is the main outcome of digital transformation and technology adoption. It is also apparent that employers place higher priority on developing the competencies of existing employees as opposed to hiring new talent who possess the right skillsets.

TO ADAPT TO COVID-19, EMPLOYERS BELIEVE THAT THEIR COMPANY NEEDS TO FOCUS ON THE FOLLOWING STRATEGIES:

Flexible work arrangements (e.g., remote working, flexible work hours) — **62%**

Leverage technology to increase digitalisation/automation — **57%**

Reskilling/upskilling employees with relevant skills — **49%**

Provide employees with support system for well-being (e.g., employee assistance program, counselling, peer network) — **43%**

Attract new talent with relevant skills — **37%**

TOP FIVE EFFECTS OF DIGITALISATION ON THE WORKFORCE

Reskilling/upskilling employees to meet new skill demands — **57%**

Employees will spend less time in automated/repetitive work — **54%**

Employees will have to take on hybrid roles
(i.e., roles that require a mix of different skill sets) — **54%**

Employees will spend more time on activities that technology is less capable of (e.g., managing people, decision making, creative thinking) — **48%**

Hiring talent with specialised skills in digital technology — **35%**

ACCORDING TO EMPLOYERS, TECHNOLOGY ADOPTION...

Only leads to upskilling/reskilling, and not layoffs — **40%**

Cannot replace soft skills (e.g., communication, EQ) — **33%**

Can only replace certain roles (e.g., highly manual, repetitive tasks) — **33%**

Cannot take on the development and management of human capital — **27%**

Cannot replace decision making skills — **27%**
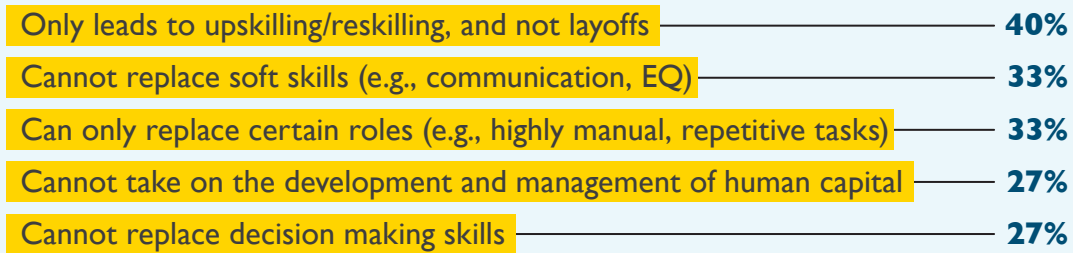
Hybrid roles continue to be instrumental in achieving business objectives.
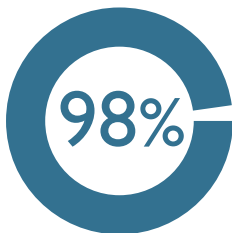
98% of **employers** either '**strongly agree**', '**agree**' **or 'somewhat agree'** that there is a greater need for employees in **hybrid roles** to meet their business objectives in the next two years.

The need for employees in hybrid roles has remained relatively stable where 99% of employers say so in 2020.
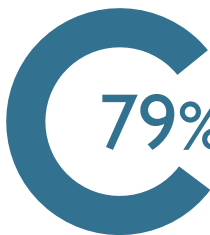
79% of **employers** are looking to hire candidates with a **broader set of skills to take up hybrid roles** as compared to 71% in 2020.

EMPLOYERS WHO ARE LOOKING TO HIRE CANDIDATES WITH A BROADER SET OF SKILLS TO TAKE UP HYBRID ROLES:

77% MANUFACTURING	**77%** BUILT ENVIRONMENT	**77%** TRADE & CONNECTIVITY
83% ESSENTIAL DOMESTIC SERVICES	**87%** MODERN SERVICES	**70%** LIFESTYLE
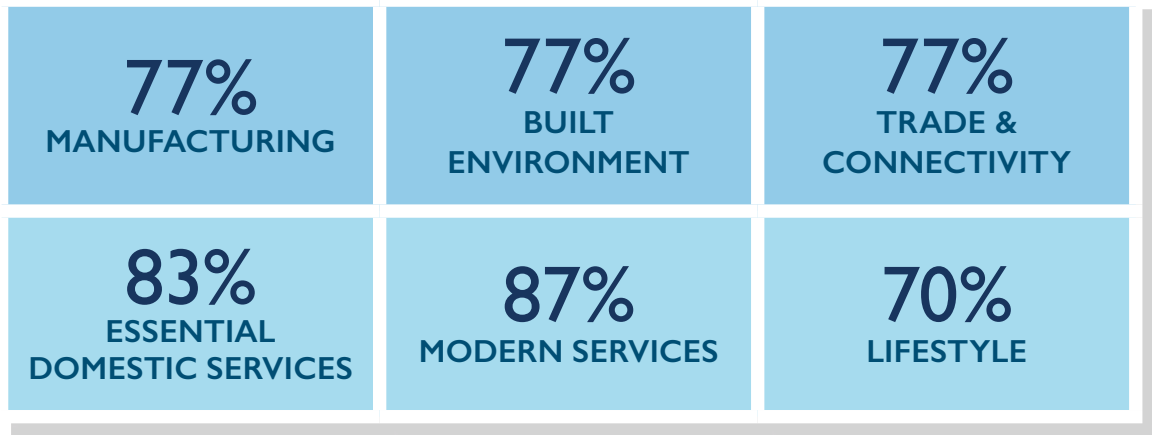
The hiring sentiments for generic and hybrid roles are consistent as employers in **Modern Services (87%)** are the most likely to hire candidates with broader skillsets to take up hybrid roles, whereas employers in **Lifestyle (70%)** are the least likely to say so.

Problem Solving and Data Analysis skills are key skillsets which employers believe are important to achieving business goals.

Problem Solving, Adaptability, Communication and Decision Making are similarly among the top five critical core skills which employees deem important to have.

TOP TEN CRITICAL CORE SKILLS WHICH EMPLOYERS DEEM IMPORTANT

Skill	%
Problem Solving	**68%**
Adaptability	**57%**
Communication	**55%**
Decision Making	**55%**
Developing People	**46%**
Creative Thinking	**45%**
Collaboration	**42%**
Learning Agility	**40%**
Transdisciplinary Thinking	**36%**
Self-Management	**35%**
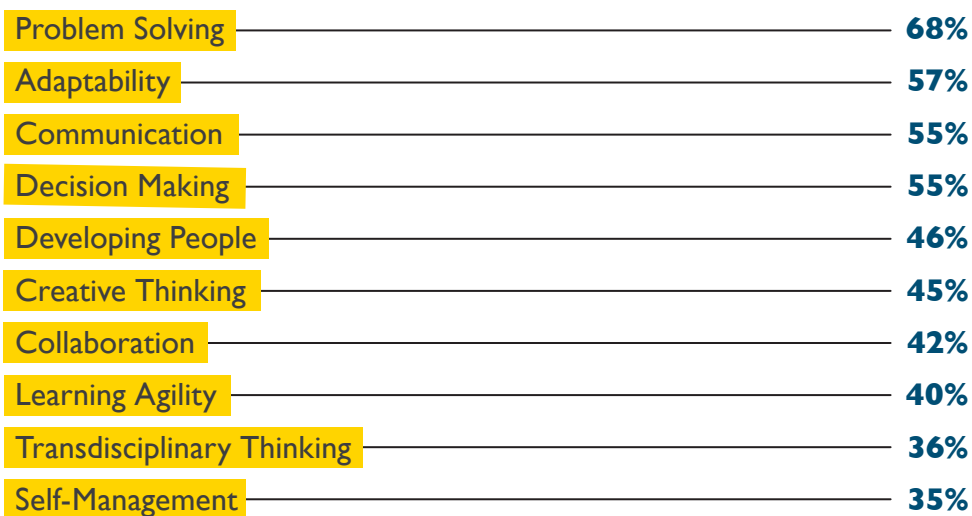
Both **employees (50%)** and **employers (57%)** believe that **Data Analysis skills** is the topmost important technology skill.

TOP TEN TECHNOLOGY SKILLS WHICH EMPLOYERS DEEM IMPORTANT

Skill	%
Data Analysis	**57%**
Digital Marketing	**44%**
Data-Driven Decision-Making	**43%**
Cybersecurity	**42%**
Artificial Intelligence / Machine Learning	**41%**
Project Management	**38%**
Governance, Risk Management and Personal Data Protection	**30%**
Web / App Design & Development	**29%**
Basic IT Support	**28%**
Robotic Process Automation	**26%**
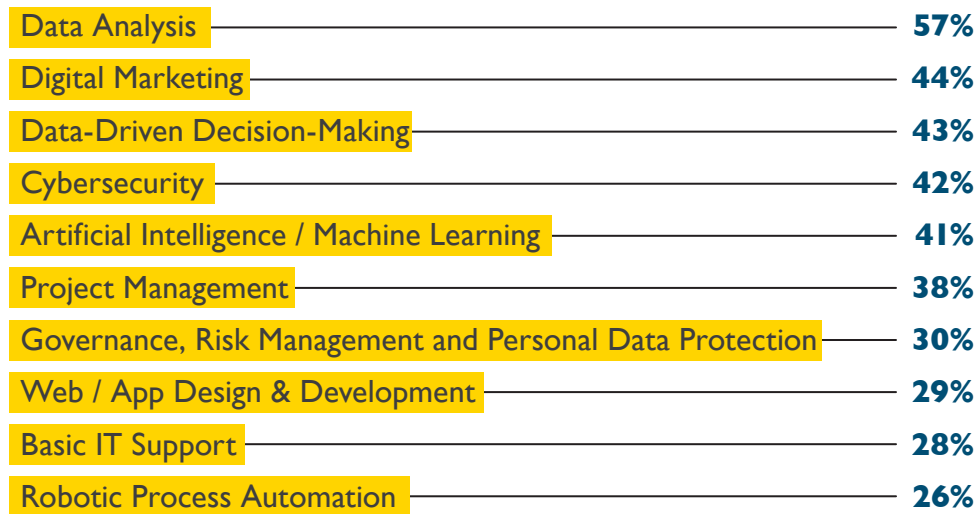
Due to the shortage of talent, employers are planning to increase workforce learning efforts as compared to 2020.

78% of **employees find it difficult to fill roles** due to **a shortage of talent** with the relevant skills.

Generally, employers continue to have trouble filling roles due to the shortage of talent whereby 72% of employers experienced the same difficulty in 2020.
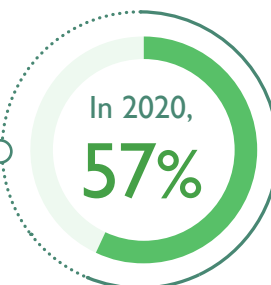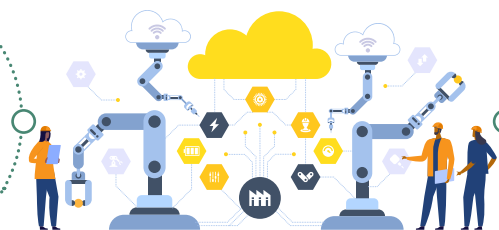
In 2021, **83%**

In 2020, **65%**

of **employers have been training or intending to train existing employees** to meet current business goals.

EMPLOYERS WHO INTEND TO UPSKILL THEIR WORKFORCE:

90% MANUFACTURING	**80%** BUILT ENVIRONMENT	**73%** TRADE & CONNECTIVITY
83% ESSENTIAL DOMESTIC SERVICES	**83%** MODERN SERVICES	**83%** LIFESTYLE
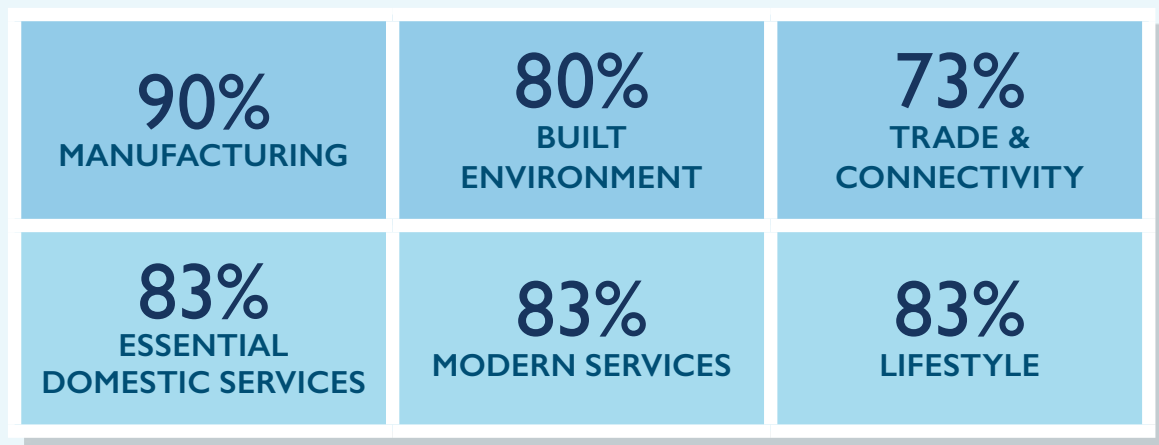
Employers in **Manufacturing (90%)** are the most likely to uptrain employees to meet the current business goals, whereas employers in **Trade & Connectivity (73%)** are the least likely to say so.

Nearly three in five employers reveal that they plan to use a mix of **both internal and external training** to upskill and reskill the workforce in the next two years.

23%
External training (i.e., training sessions organised by external organisations)

59%
Mix of both internal and external training

17%
Internal training (i.e., by internal company members)
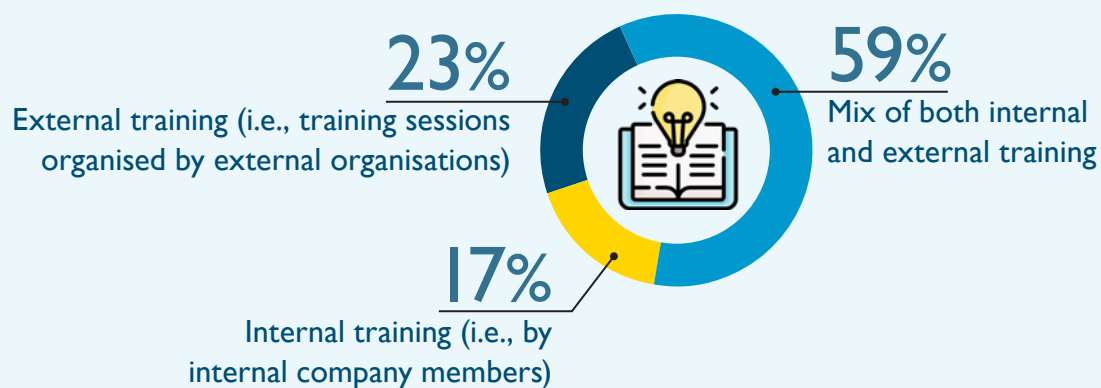
Figures are rounded to the nearest whole number.

While employers are generally satisfied with their organisation's learning and development programmes, many employees reveal that they desire a more active role from their company to support them in skills upgrading.

15%

2%

40%

3%

Employers are generally satisfied with their organisation's workforce learning programmes to plug the skills gap.

41%

■ Very satisfied ■ Satisfied ■ Somewhat satisfied ■ Not really satisfied ■ Not satisfied at all
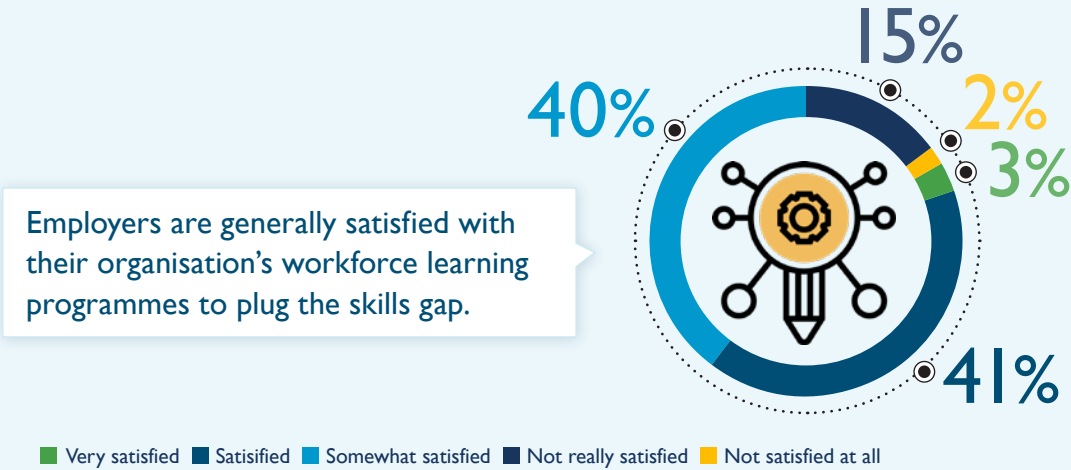
Although employers acknowledge that on the job training is the most effective way to support employees in upskilling, employees reveal that their company could provide more support by **assigning specific courses to attend (47%)** and providing employees with a **budget for upskilling purposes (42%)**.

TOP EIGHT WAYS TO UPSKILL THE WORKFORCE

On the job training — **47%**

Job shadowing opportunities (i.e., learn from other employees with different job scopes) — **46%**

Mentoring programmes (i.e., paired with a senior employee) — **44%**

Enrol employees in external programmes offered by training providers — **42%**

Offer short, bite-sized courses (e.g., mobile or micro-learning) — **38%**

Assign specific courses for employees to attend (e.g., face-to-face/ virtual classes) — **33%**

Obtain certifications via Massive Open Online Courses (e.g., Coursera, Udemy) — **31%**

Buddy programmes (i.e., paired with a peer) — **29%**

SKILLS & JOB TRENDS
BY INDUSTRY CLUSTER

MANUFACTURING
CLUSTER

ELECTRONICS, MARINE & OFFSHORE AND AEROSPACE AND ENERGY & CHEMICALS

87% of **employers** are either '**very optimistic**', '**optimistic**' or '**somewhat optimistic**' to about the Singapore job market.

97% of **employers** indicate that their company will **increase digitalisation to either a 'large extent' or 'some extent'** at work to achieve stronger business outcomes.

83% of **employers find it difficult to fill roles** due to a **shortage of talent** with the relevant skills.

90% of **employers have been training or intending to train existing employees** to meet current business goals.

HIRING TRENDS

77% of **employers** are looking to hire candidates with a **broader set of skills to take up hybrid roles**.

In 2021, **73%**

In 2020, **57%**

of **employers have been hiring or intending to hire** new talent to meet their company's current business goals.

TOP FIVE DEPARTMENTS WHERE EMPLOYERS ARE INTENDING TO HIRE

55%
IT & Digital

36%
Business Operations

32%
Leadership & Management
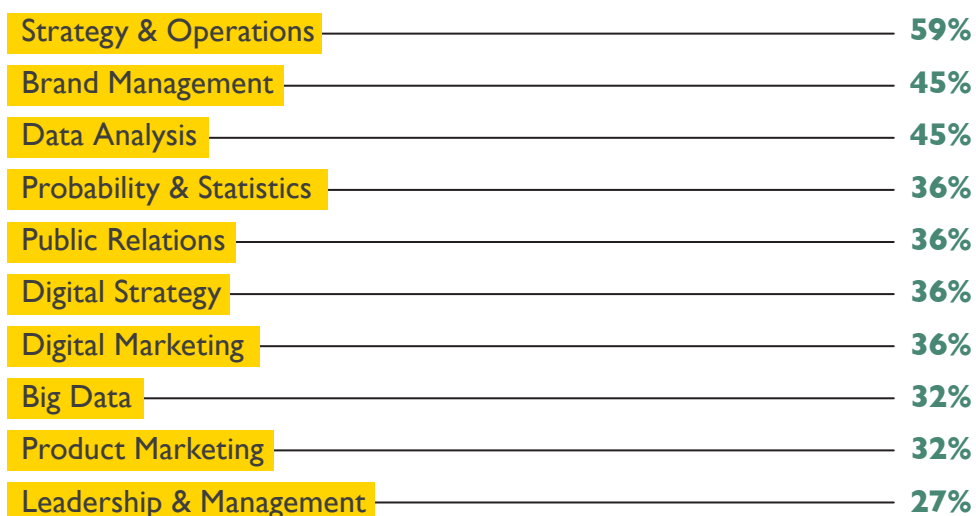
TOP TEN JOB ROLES WHICH EMPLOYERS ARE LOOKING TO HIRE

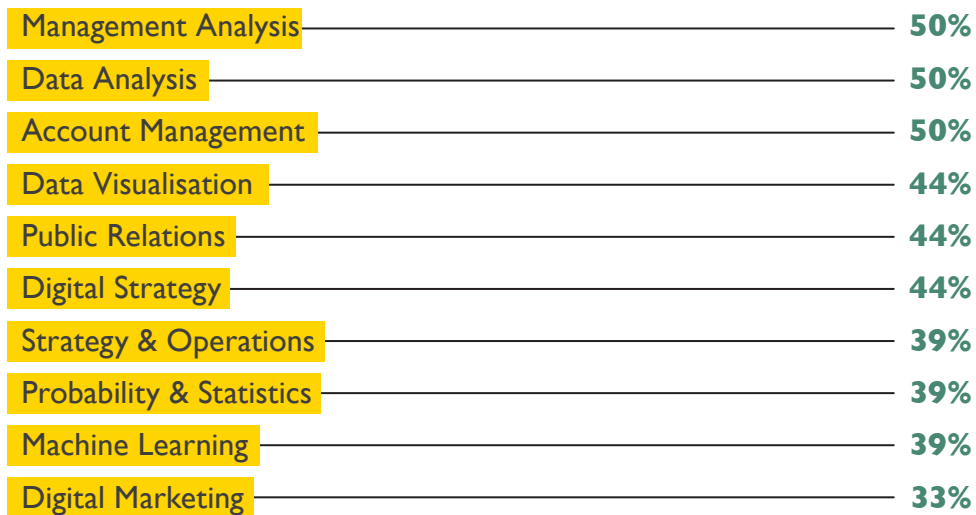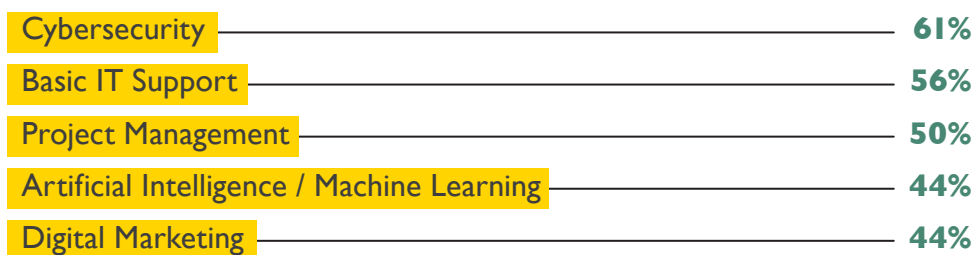| Role	%
Strategy & Operations	59%
Brand Management	45%
Data Analysis	45%
Probability & Statistics	36%
Public Relations	36%
Digital Strategy	36%
Digital Marketing	36%
Big Data	32%
Product Marketing	32%
Leadership & Management	27%

TOP COMPETENCIES IN DEMAND

TOP FIVE CRITICAL CORE SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Skill	%
Adaptability	45%
Collaboration	41%
Developing People	41%
Communication	41%
Problem Solving	36%

TOP FIVE TECHNOLOGY SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Skill	%
Project Management	41%
Data-Driven Decision-Making	36%
Robotic Process Automation	36%
Digital Marketing	36%
Web / App Design & Development	32%
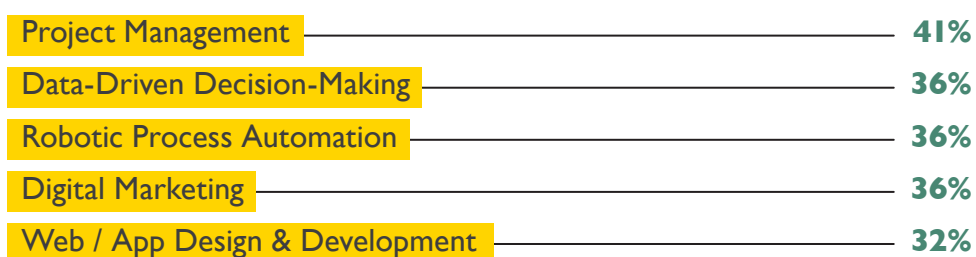
BUILT ENVIRONMENT
CLUSTER

CONSTRUCTION, REAL ESTATE, ENVIRONMENTAL SERVICES AND SECURITY

73% of **employers** are **either 'very optimistic', 'optimistic' or 'somewhat optimistic'** to about the Singapore job market.

90% of **employers** indicate that their company will **increase digitalisation to either a 'large extent' or 'some extent'** at work to achieve stronger business outcomes.

77% of **employers find it difficult to fill roles** due to a **shortage of talent** with the relevant skills.

80% of **employers have been training or intending to train existing employees** to meet current business goals.

HIRING TRENDS

77% of **employers** are looking to hire candidates with a **broader set of skills to take up hybrid roles**.

In 2021, **60%**

In 2020, **61%**

of **employers** have been **hiring or intending to hire** new talent to meet their company's current business goals.

TOP THREE DEPARTMENTS WHERE EMPLOYERS ARE INTENDING TO HIRE

44%
Leadership & Management

44%
Business Operations

39%
Product Development

TOP TEN JOB ROLES WHICH EMPLOYERS ARE LOOKING TO HIRE

Management Analysis	50%
Data Analysis	50%
Account Management	50%
Data Visualisation	44%
Public Relations	44%
Digital Strategy	44%
Strategy & Operations	39%
Probability & Statistics	39%
Machine Learning	39%
Digital Marketing	33%

TOP COMPETENCIES IN DEMAND

TOP FIVE CRITICAL CORE SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Adaptability	61%
Decision Making	50%
Problem Solving	50%
Creative Thinking	44%
Communication	44%

TOP FIVE TECHNOLOGY SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Cybersecurity	61%
Basic IT Support	56%
Project Management	50%
Artificial Intelligence / Machine Learning	44%
Digital Marketing	44%

TRADE & CONNECTIVITY
CLUSTER
AIR TRANSPORT, SEA TRANSPORT, LAND TRANSPORT, LOGISTICS AND WHOLESALE TRADE

80% of **employers** are either 'very optimistic', 'optimistic' or 'somewhat optimistic' to about the Singapore job market.

90% of **employers** indicate that their company will **increase digitalisation to either a 'large extent' or 'some extent'** at work to achieve stronger business outcomes.

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HIRING TRENDS

77% of **employers** are looking to hire candidates with a **broader set of skills to take up hybrid roles**.

In 2021,
60%

In 2020,
46%

of **employers** have been **hiring or intending to hire** new talent to meet their company's current business goals.

TOP THREE DEPARTMENTS WHERE EMPLOYERS ARE INTENDING TO HIRE

61%
Business Operations

56%
Product Development

56%
IT & Digital

TOP TEN JOB ROLES WHICH EMPLOYERS ARE LOOKING TO HIRE

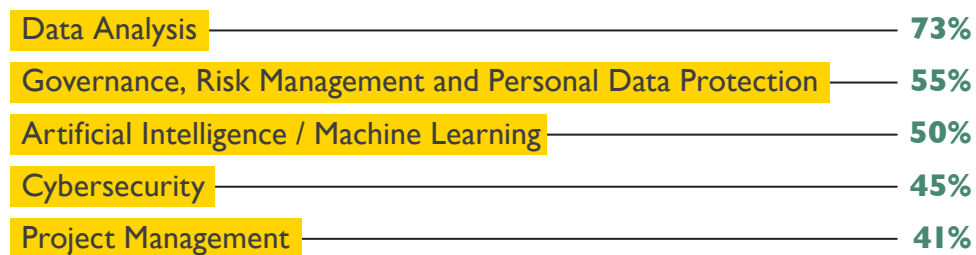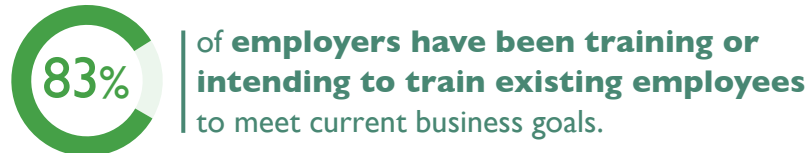|	
Strategy & Operations	61%
Data Analysis	56%
Data Visualisation	44%
Data Management	44%
Digital Marketing	44%
Product Marketing	44%
Probability & Statistics	39%
Machine Learning	39%
Big Data	39%
Business Development	33%

TOP COMPETENCIES IN DEMAND

TOP FIVE CRITICAL CORE SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

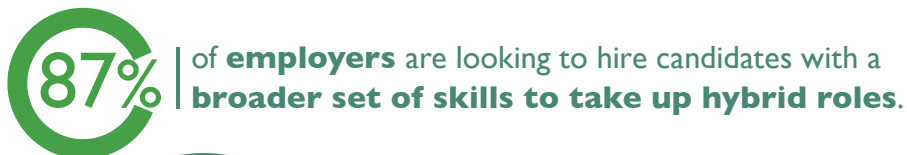|	
Transdisciplinary Thinking	50%
Sense Making	44%
Collaboration	44%
Adaptability	44%
Learning Agility	44%

TOP FIVE TECHNOLOGY SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Artificial Intelligence / Machine Learning	50%
Data-Driven Decision-Making	50%
Cybersecurity	44%
Data Analysis	44%
Governance, Risk Management and Personal Data Protection	33%
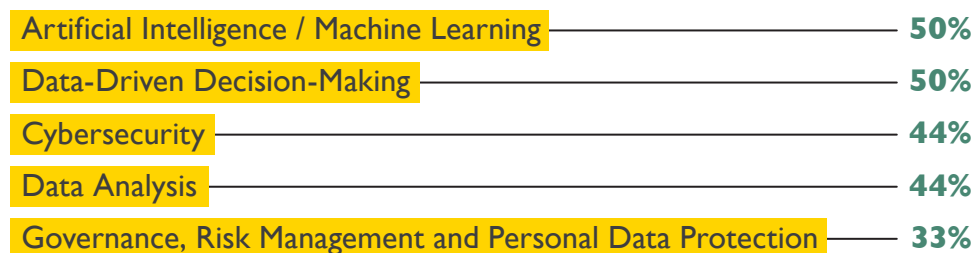
ESSENTIAL DOMESTIC SERVICES CLUSTER

HEALTHCARE AND EDUCATION

80% of **employers** are either **'very optimistic', 'optimistic' or 'somewhat optimistic'** to about the Singapore job market.

100% of **employers** indicate that their company will **increase digitalisation to either a 'large extent' or 'some extent'** at work to achieve stronger business outcomes.

80% of **employers find it difficult to fill roles** due to **a shortage of talent** with the relevant skills.

83% of **employers have been training or intending to train existing employees** to meet current business goals.

HIRING TRENDS

83% of **employers** are looking to hire candidates with a **broader set of skills to take up hybrid roles**.

In 2021, **73%**

In 2020, **65%**

of **employers** have been **hiring or intending to hire** new talent to meet their company's current business goals.

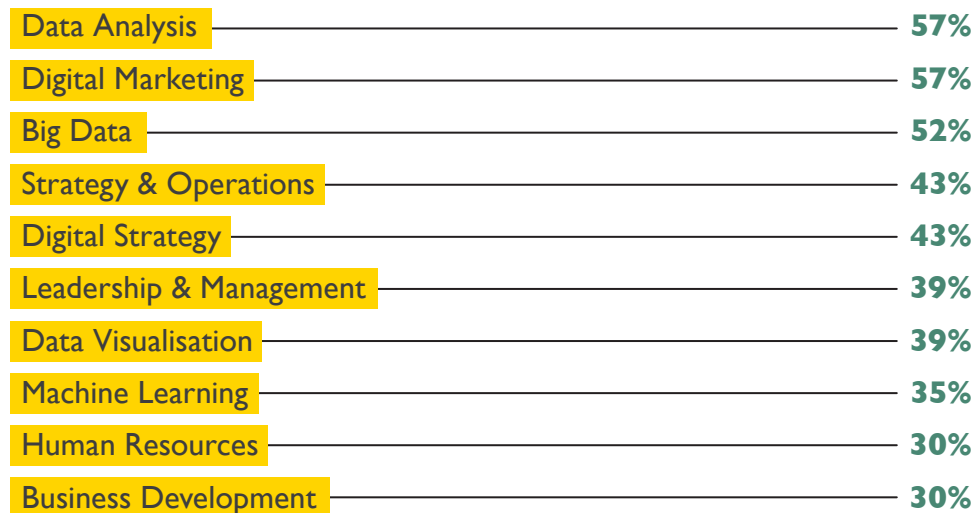## TOP THREE DEPARTMENTS WHERE EMPLOYERS ARE INTENDING TO HIRE

50% IT & Digital

41% Business Operations

36% Leadership & Management

TOP TEN JOB ROLES WHICH EMPLOYERS ARE LOOKING TO HIRE

Data Visualisation	59%
Data Management	55%
Data Analysis	55%
Strategy & Operations	50%
Digital Strategy	45%
Data Mining	45%
Public Relations	41%
Leadership & Management	36%
Data Modelling	36%
Business Intelligence Analysis	36%

TOP COMPETENCIES IN DEMAND

TOP FIVE CRITICAL CORE SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Developing People	59%
Decision Making	55%
Adaptability	50%
Collaboration	45%
Creative Thinking	41%

TOP FIVE TECHNOLOGY SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Data Analysis	73%
Governance, Risk Management and Personal Data Protection	55%
Artificial Intelligence / Machine Learning	50%
Cybersecurity	45%
Project Management	41%

MODERN SERVICES CLUSTER

PROFESSIONAL SERVICES, ICT & MEDIA, AND FINANCIAL SERVICES

67% of **employers** are either **'very optimistic', 'optimistic' or 'somewhat optimistic'** to about the Singapore job market.

96% of **employers** indicate that their company wil **increase digitalisation to either a 'large extent' or 'some extent'** at work to achieve stronger business outcomes.

87% of **employers find it difficult to fill roles** due to **a shortage of talent** with the relevant skills.

83% of **employers have been training or intending to train existing employees** to meet current business goals.

HIRING TRENDS

87% of **employers** are looking to hire candidates with a **broader set of skills to take up hybrid roles**.

In 2021, **77%**

In 2020, **62%**

of **employers** have been **hiring or intending to hire** new talent to meet their company's current business goals.

TOP THREE DEPARTMENTS WHERE EMPLOYERS ARE INTENDING TO HIRE

79%
IT & Digital

43%
Human Resources

35%
Leadership & Management

TOP TEN JOB ROLES WHICH EMPLOYERS ARE LOOKING TO HIRE

Data Analysis	**57%**
Digital Marketing	**57%**
Big Data	**52%**
Strategy & Operations	**43%**
Digital Strategy	**43%**
Leadership & Management	**39%**
Data Visualisation	**39%**
Machine Learning	**35%**
Human Resources	**30%**
Business Development	**30%**

TOP COMPETENCIES IN DEMAND

TOP FIVE CRITICAL CORE SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Collaboration	**52%**
Developing People	**52%**
Learning Agility	**48%**
Creative Thinking	**43%**
Problem Solving	**39%**

TOP FIVE TECHNOLOGY SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Cybersecurity	**57%**
Data Analysis	**57%**
Artificial Intelligence / Machine Learning	**52%**
Digital Marketing	**43%**
Agile / Scrum	**43%**
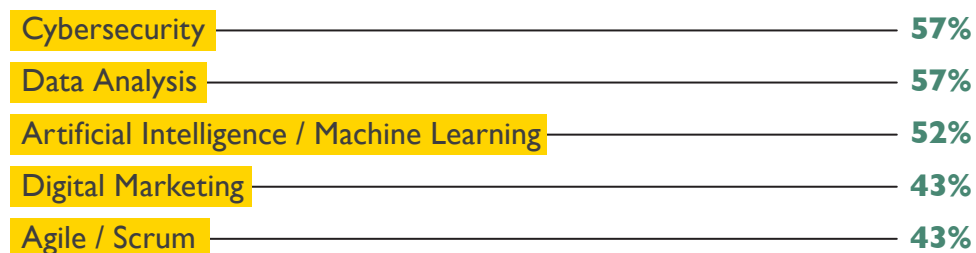
LIFESTYLE CLUSTER

FOOD SERVICES, FOOD MANUFACTURING, RETAIL AND HOTELS

71% of **employers** are either '**very optimistic**', '**optimistic**' or '**somewhat optimistic**' to about the Singapore job market.

90% of **employers** indicate that their company will **increase digitalisation to either a 'large extent' or 'some extent'** at work to achieve stronger business outcomes.

70% of **employers find it difficult to fill roles** due to a **shortage of talent** with the relevant skills.

83% of **employers have been training or intending to train existing employees** to meet current business goals.

HIRING TRENDS

70% of **employers** are looking to hire candidates with a **broader set of skills to take up hybrid roles**.

In 2021, **50%**

In 2020, **33%**

of **employers** have been **hiring or intending to hire** new talent to meet their company's current business goals.

TOP THREE DEPARTMENTS WHERE EMPLOYERS ARE INTENDING TO HIRE

67% IT & Digital

47% Sales

56% Business Operations

TOP TEN JOB ROLES WHICH EMPLOYERS ARE LOOKING TO HIRE

Data Analysis	67%
E-Commerce	60%
Digital Marketing	60%
Business Intelligence Analysis	53%
Content Marketing	53%
Brand Management	53%
Social Media Marketing	47%
Product Marketing	47%
Market Research	40%
Public Relations	40%

TOP COMPETENCIES IN DEMAND

TOP FIVE CRITICAL CORE SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Adaptability	80%
Communication	67%
Problem Solving	53%
Customer Orientation	53%
Learning Agility	53%

TOP FIVE TECHNOLOGY SKILLS WHICH EMPLOYERS ARE LOOKING TO HIRE

Project Management	60%
Digital Marketing	60%
Data Analysis	53%
Basic IT Support	47%
Cybersecurity	47%

CONCLUSION

The pandemic was indeed a catalyst for digitalisation where the pace of the technology adoption has not relented since[4]. As we enter the third year of living with COVID-19, it has become apparent that businesses, roles and career paths will continue to be redefined[5]. Workers are well aware of the effects of digitalisation and most are apprehensive of the changes it brings (81%). This fear has thus fueled employees to seek out training to upgrade their skillsets in order to emerge stronger and more resilient amidst this period of uncertainty. This has led many to upskill on their own outside of work (62%), with an overwhelming majority hoping for more support from their employers (90%).

There is also a pressing need for employers to drive human-centric company transformation. Employers must recognise that digitalisation is less about technology, but more about the people – where the ability to adapt to a digital future depends on the development of skills[6]. While many employers are actively hiring, it is key that organisations supplement it with workforce learning to develop the skills of existing employees. The top technology skills in demand include Data Analysis (49%), Cybersecurity (45%) and Digital Marketing (44%). While the emphasis has been on digitalisation, we should not discount the importance of adaptive skills. Generally, the top critical core skills in demand include Adaptability (52%), Developing People (48%) and Collaboration (44%).

As we continue to navigate through the COVID-19 storm, it is instrumental for employees and employers to embrace a mindset with the will to learn over time as the demand for different skills evolves[7]. It is essential to build a learning culture within the organisation such that workers will continue to develop new technical competencies to match the pace of technological change and build complementary adaptive skills required in today's digital age.

4   **Forbes. 2021.** The Unprecedented Pace of Change. [Accessed 27 December 2021].
5   **PwC. 2021.** Hopes and Fears 2021 – Singapore Report. [Accessed 27 December 2021].
6   **Harvard Business Review. 2021.** Digital Transformation Is About Talent, Not Technology. [Accessed 27 December 2021].
7   **BCG. 2021.** Future of Jobs in the Era of AI. [Accessed 27 December 2021].

RECOMMENDATIONS TO EMPLOYEES

1. MASTER YOUR CAREER PATH

Employees should take stock of their current skillsets and reassess the core skills needed for future job roles in their sector or sectors which they wish to pivot into. Learning should not stop when formal education ends, especially on the back of pandemic-fueled changes in the world of work. Stay prepared for disruption by enhancing your knowledge on new industry developments to align your goals with the relevant in-demand skills.

"Employees are understandably fearful during a period of economic uncertainty to venture into new job roles. This 'flight to safety' also explains employees' hesitancy in looking at new areas for employment. Yet, it should not be a fear that paralyses and makes us powerless to act. Instead, it should provide the impetus to step out of our comfort zone, so as to have access to greater and more exciting opportunities in the future."

- Mayank Parekh, CEO at Institute of Human Resource Professionals (IHRP)
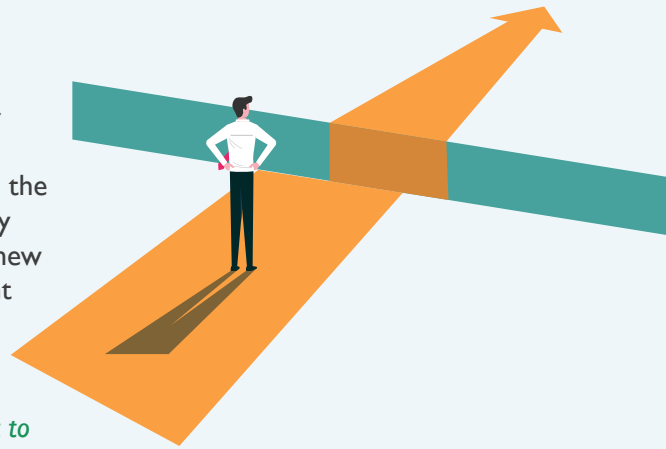
2. DEVELOP DIGITAL FLUENCY AS A CORE SKILL

As technology has propelled businesses into the digital realm, employees should consider how digitalization can be used as a tool to support their work, rather than fear the prospect of job displacement. Digital fluency, according to SkillsFuture Singapore, is defined as "Leveraging digital technology tools, systems, and software across work processes and activities to solve problems, drive efficiency and facilitate information sharing." Possessing such know-how not only helps with making one more efficient, but also future-proofs individuals by enhancing their employability.

"Businesses have transformed, and so have many workplaces with digitalisation. Many employers are now integrating various apps and software into their business functions. Therefore, having technological knowledge, and upskilling in technology skills is key to boost individuals' employability. Workers who are able to adapt well with digital transformation will be considered an asset to the organisations they work for, regardless of which sector they are in, as digital skills today are easily transferrable across job functions and sectors. The concept automation or artificial intelligence (AI) may be daunting to some, however employees need to embrace digitalisation as a progress in the way we do things, which will help tremendously in their daily work."

- Anthony Chew, Director of Infocomm Technology at NTUC LHUB

3. SHARPEN ADAPTIVE SKILLS FOR HUMAN-CENTRIC DIGITAL WORKPLACE

Although digitalisation may displace routine and administrative tasks, it provides the opportunity for workers with the right skillsets to be redeployed into higher-value jobs. Workers must hone adaptive skills to supplement the shortcomings of technologies. It is key for workers to invest not only in technology skills, but also in critical core skills which will be an advantage regardless of the market disruptions.

> "Businesses are accelerating their digital platforms for better customer experiences as well as operational efficiency. But humans with critical core skills are still needed to reap the full benefits of technology. Workers should work with their supervisors and employers to understand what these critical core skills are at their workplace and how they can upskill to take advantage of opportunities."
> **- Mayank Parekh, CEO at IHRP**

4. TRANSLATE NEW KNOWLEDGE INTO SKILLS TO TAKE ON HYBRID ROLES

As technology becomes increasingly pervasive in the modern workplace, jobs will continue to be redesigned to allow workers to take on higher value chain roles. With this transition, it is critical for employees to seize workplace learning opportunities to not only acquire knowledge but to also apply it in their work. The translation of acquired knowledge into applicable competencies is essential in negotiating the growing technology component in our roles and responsibilities. Initiate a conversation with employers to provide ample opportunity to translate new knowledge to higher levels of expertise.

> "Hybrid roles emerge when companies redesign tasks to make better use of the limited manpower to meet resource needs across the entire value chain. We should encourage employees to seize this opportunity to broaden their roles by translating knowledge and experience into skills when performing new tasks."
> **- Mayank Parekh, CEO at IHRP**

RECOMMENDATIONS
TO EMPLOYERS

5. ADDRESS FEARS OF JOB DISPLACEMENT

Employers should communicate and reassure workers that digital transformation does not equate to lay-offs, but rather upskilling and reskilling is a key strategy that the organization will focus on. By openly communicating this view, employees will feel that they are valued and have a sense of belonging to the company in the long haul.

"Some jobs will go away, but there will also be new jobs created. Studies show that successful organisations are those that share information in advance to prepare their workforce for the change that is coming. In doing so, companies gain employee trust and confidence in their growth and future."
- Mayank Parekh, CEO at IHRP

6. UPSKILL AND RESKILL TO PLUG SKILLS GAPS

To overcome the talent crunch where job vacancies are outpacing the talents available, a win-win solution is to invest in the employability of existing workers. This will in turn build competencies that create opportunities to improve business performance. In addition, building an internal talent pipeline has been proven to be more economical than recruiting new staff as and when the need arises.

"Retraining your existing workers is the place to start when developing a future-ready workforce. These workers already have institutional knowledge about the business, its processes, and customers. It is evident that the more successful organisations are those that have engaged their workers, provided context and given ample opportunities to those who are willing and able to upskill."
- Mayank Parekh, CEO at IHRP

7. PLACE WORKFORCE INVESTMENT ON TOP OF THE BUSINESS AGENDA

Employers should consider investing in effective metrics to evaluate their human capital and gather feedback from ground employees. Although frameworks to quantify an organisation's human capital remain nascent, employers need to put in a place an agile workforce investment strategy to better facilitate skills development for employees. To drive this strategic imperative, line-managers will need to actively support employees' skills development by listening to and addressing the obstacles workers face. By investing in employee training, employers stand to boost the company's business capabilities.

"Having an agile-ready workforce is key to remain resilient in future disruptions. Employees who are developed to swiftly adapt and adjust to operate successfully in times of adversities, will save businesses. Employers should work together with employees to make organisational shifts in upskilling by identifying skills gaps and planning for learning solutions. This will help in getting employees to work in cross-functional teams and effectively respond to changes at the workplace. Evolution is therefore necessary."

- Anthony Chew, Director of Infocomm Technology at NTUC LHUB

8. EMBRACE NEW LEARNING MODES TO PROMOTE LEARNING FLEXIBILITY

Remote working arrangements and digital disruptions have highlighted the need for innovative training methods which can provide more learning flexibility and convenience without compromising training quality. Employers can consider using educational technology to encourage upskilling and build a continuous learning culture in the workplace. With digital online learning platforms, employers can create better learning strategies and policies to direct and support employees towards skill development. Employers can harness the power of education technology to establish better matches for employees to opportunities based on their skills and competencies.

"Remote working from home and hybrid workplace arrangements have been the mainstay for many organisations today. As COVID-19 enters its third-year mark, it is time for employers to move forward and explore online modes of learning to develop and effectively engage their workforce. For example, online mobile learning platforms such as NTUC LearningHub's Learning eXperience Platform (LXP) app will soon allow companies to develop and implement learning and development solutions for employees through a customisable learning management system. Harnessing digital solutions will also provide opportunities for open two-way discussions between employers and employees, thereby enabling human-centric company transformation through training."

**- Anthony Chew, Director of Infocomm Technology at NTUC LHUB**

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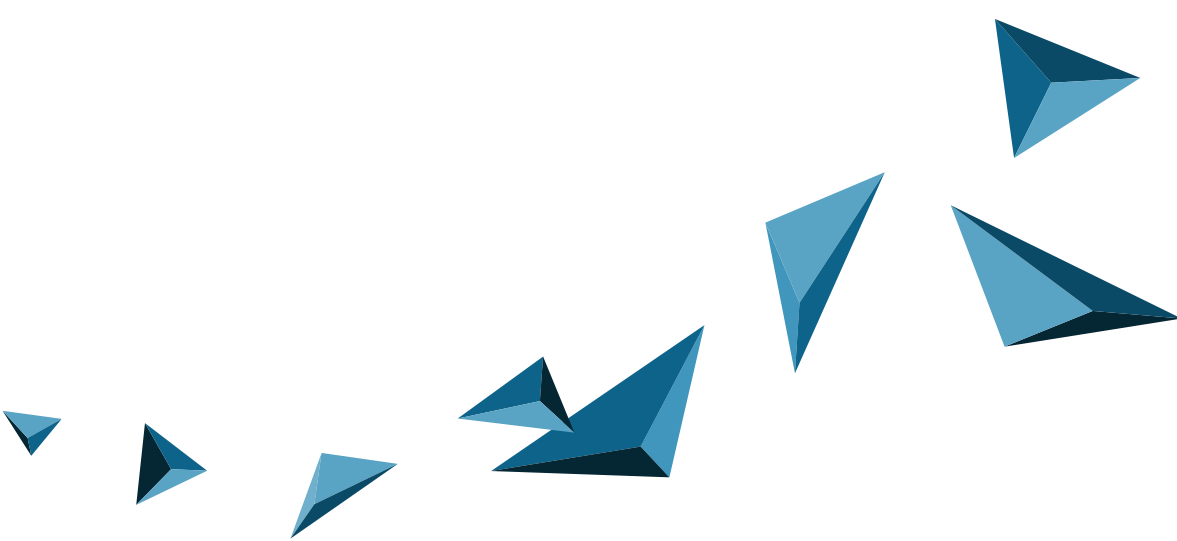
ABOUT
NTUC LEARNINGHUB

NTUC LearningHub is the leading Continuing Education and Training provider in Singapore which aims to transform the lifelong employability of working people. Since our corporatisation in 2004, we have been working with employers and individual learners to provide learning solutions in areas such as Cloud, Infocomm Technology, Healthcare, Employability & Literacy, Business Excellence, Workplace Safety & Health, Security, Human Resources and Foreign Worker Training.

To date, **NTUC LearningHub** has helped over 25,000 organisations and achieved over 2.6 million training places across more than 500 courses with a pool of over 900 certified trainers. As a Total Learning Solutions provider to organisations, we also forge partnerships and offer a wide range of relevant end-to-end training solutions and work constantly to improve our training quality and delivery. In 2020, we have accelerated our foray into online learning with our Virtual Live Classes and, through working with best-in-class partners such as IBM, DuPont Sustainable Solutions and GOI, asynchronous online courses.

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