

HAYS Recruiting experts
in Accountancy & Finance

THE FUTURE OF THE WORKFORCE

What does the future mean to you?

Donna Bliss – 10th November





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CHANGE = CONSTANT

- **Technological advances**
- **Economic transition to services sector**
- **Leadership & government changes**

THE SHIFT: THE FUTURE OF WORK IS ALREADY HERE



“...find a workforce made up of people whose levels of familiarity with technology are incredibly diverse. Those born in the 1950s will be able to remember using typewriters and correction fluid during their early working lives... Meanwhile, those born in the 1990s will have used computers throughout their childhood as a crucial component of their educational experience.”

Professor Lynda Gratton
Professor of Management Practice of London Business School



THE SHIFT: THE FUTURE OF WORK IS ALREADY HERE



Professor Lynda Gratton
Management Practice
London Business School

“...with routine jobs... outsourced or replaced by technology, leaving only non-routine jobs at the ends of the skill continuum – those that require either low-end skills or high-end skills.”

“...puts huge pressure on people to invest more in their skill development and to identify skills that are both valuable and unlikely to be substituted by technology.”



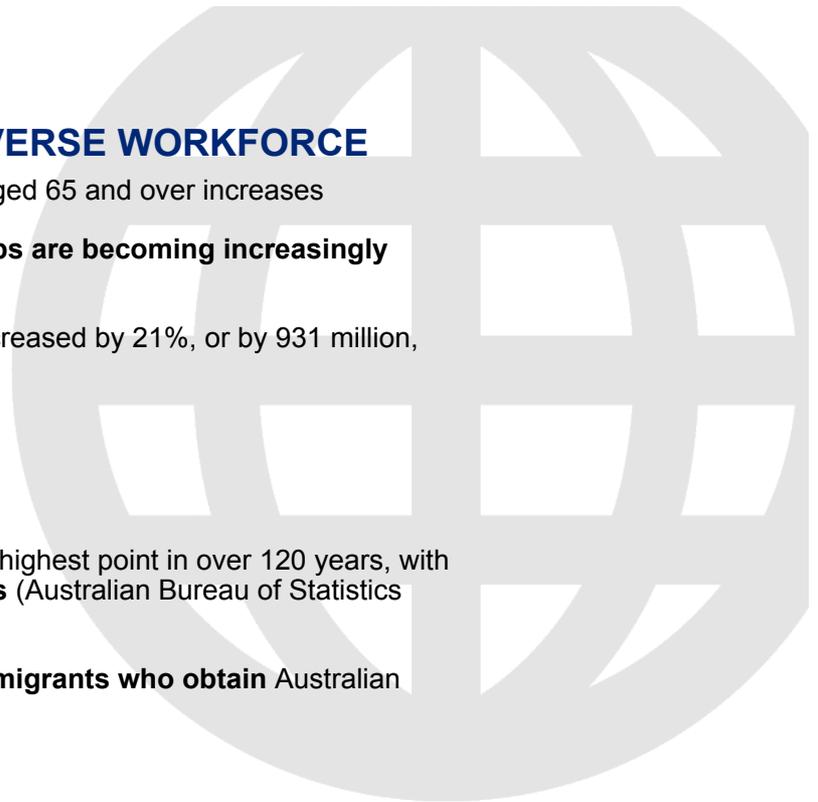
**WHAT WILL OUR FUTURE
WORKFORCE LOOK LIKE?**

AN OLDER MORE CULTURALLY DIVERSE WORKFORCE

- The number of **economically active people** aged 65 and over increases
- Continuous skills development and **mentorships are becoming increasingly** important in the future
- By **2030 the world's labour force** will have increased by 21%, or by 931 million, to around 4.4 billion

OVERSEAS BORN POPULATION

- The proportion of Australians born overseas at highest point in over 120 years, with **28% of Australia's population born overseas** (Australian Bureau of Statistics (ABS))
- According to 2013 data from the ABS, **77% of migrants who obtain** Australian citizenship participate in the labour force



GENDER DIVERSITY

- By 2030 – and **perhaps driven by millennials'** liberal and tolerant mind set – equality at the executive levels will be possible
- **Female participation** in the workforce is expected to continue to increase, particularly since more women graduate from university now than men
- In 1975 only 46% of women aged 15 to 64 had a job, today around 66% of women aged 15 to 64 are employed, **by 2055 this is projected to increase** to around 70%





A DIGITALLY LITERATE WORKFORCE

KEY TREND: DIGITAL LITERACY

- Understanding of **computational thinking**, app building and the user experience

For example, rather than customer service representatives in call centres, today we see more live chat attendants who will interact with customers online and on social media.

- Even **today's senior manager needs digital** expertise to be able to locate knowledge, assess how valid it is, and then work with others to determine what to do with it

FOUNDATION FOR YOUNG AUSTRALIANS



Study: Skills sought by employers three years ago Vs skills required today

4.2 million job ads analysed for roles required less than 5 years of experience

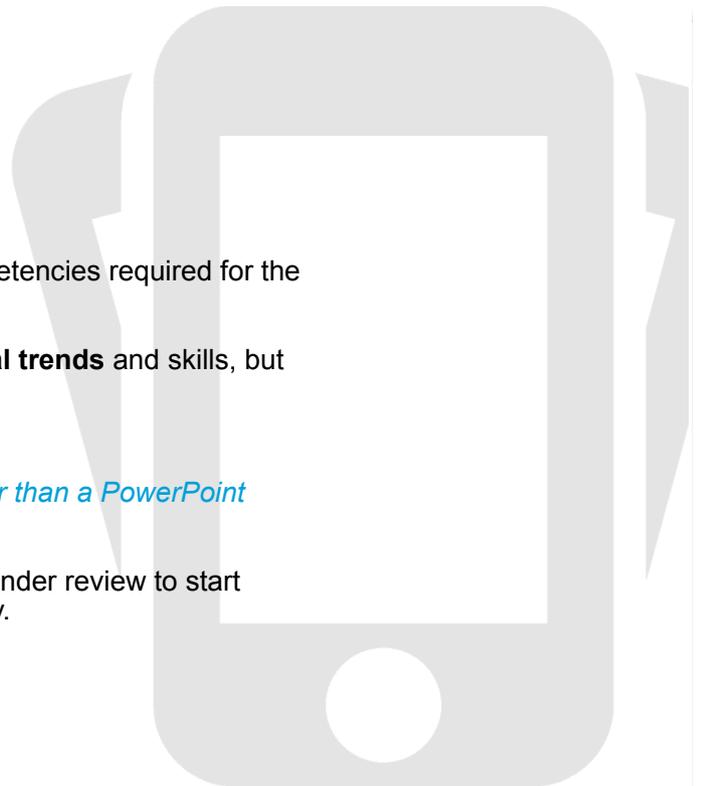
“Since 2013 the demand for digital skills has increased by more than 200%”

WHAT THIS MEANS FOR EMPLOYERS

- Start looking for candidates who, in addition to the competencies required for the particular job vacancy, are **digital makers**
- We need candidates who are **not only observing digital trends** and skills, but who are actively up-skilling themselves.

How you can help ? Ask staff to create an app rather than a PowerPoint presentation for their next talk

- Our education system, **starting at primary school**, is under review to start teaching digital literacy alongside numeracy and literacy.



UP-SKILLING FOR DIGITALISATION

- The Virtual World

A retail brand's customers will be able to virtually try on an outfit and then perform the payment transaction.

Colleagues located in various locations will meet in a virtual environment.



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VIRTUAL REALITY



MYOB is one of the first organisations to **utilise virtual reality in its on boarding process.**
Day 1 = new employees are transported to Melbourne's Eureka Skydeck, to a basketball court, to a rally car
even to a fighter jet high in the sky - **all without leaving the office**



A WORKFORCE THAT RELIES ON DATA-BASED DECISIONS

ADOPTING DATA-DRIVEN DECISION MAKING

2,500,000,000,000,000,000

- **90% of the world's data** has been created in the last 2 years alone
- There's a lot of data being created but only a small amount of it is being used
- This amount of data **creates huge potential** to track behaviours, predict buying patterns and answer almost any question you care to pose

BIG DATA & SKILLS IN DEMAND

- Our ability to utilise **Big Data will** improve
- **Digital literacy** will extend to understanding how to collect, interpret and make decisions based on data.
- Big Data will increasingly **becoming a priority** to drive business decisions in future
- We can also expect to see an **explosion of data analytics** and data scientist jobs in future
- Even now these skills are in demand **yet there is a skills shortage**

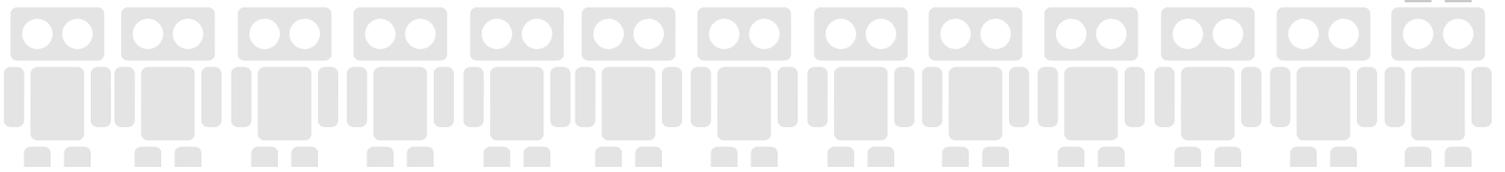


**A WORKFORCE THAT USES
AUTOMATED SYSTEMS AND
ARTIFICIAL INTELLIGENCE**

AUTOMATION & AI

- It has already begun **to impact a diverse range of workplaces** and jobs: automated self-service checkouts in retail stores to assembly lines in manufacturing plants
- Machines are also now capable of conducting **non-routine tasks** such as driving, legal writing and diagnostics.

ANZ is one example of an organisation utilising Robotic Process Automation (RPA) to perform tasks ranging from payroll administration to helpdesk support and customer service



AFR ARTICLE EXAMINED A REPORT BY MINDFIELDS

Figure 4 - Functional areas where RPA can deliver benefits today

	Human Resources	Finance & Accounting	Customer Services
KEY PROCESSES	Payroll Administration	Invoice Processing	Query Management
	Benefits Enrolment	Accounts Receivable (OTC)	Billing Support
	Employee Data Management	Order Management	Complaint Management
	Claims Management	Procurement/Sourcing	Order Processing
	Application Tracking	Accounts Payable (PTC)	Subscription Management
	On Boarding/Off Boarding	Records to Report (RTR)	Helpdesk Management
	Routine Query Management	Billing Management	Sales support

REPETITIVE, RULE-BASED, LOW SKILL TASKS

Source: Mindfields

THE FUTURE OF THE LABOUR MARKET?

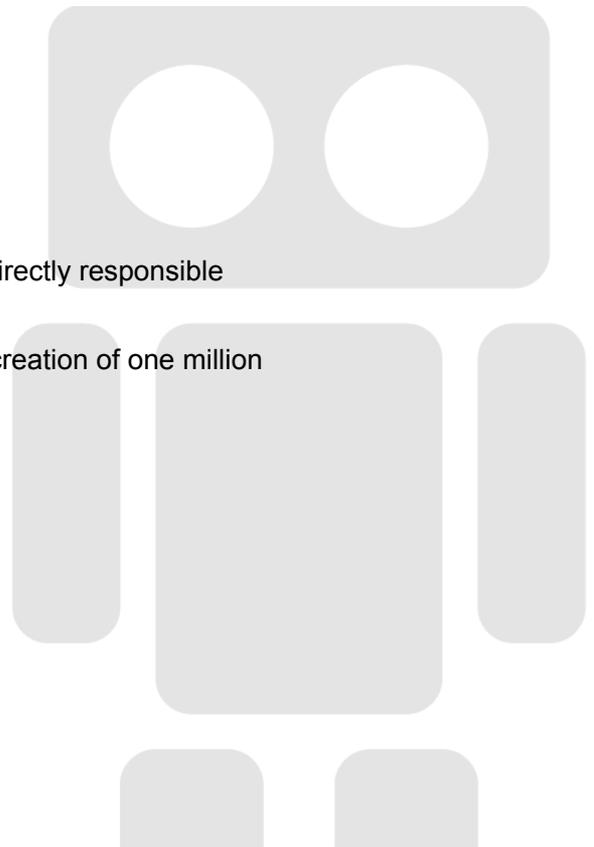
- *“Demise of the human worker” vs. “The opportunity for advanced robotics to unleash a massive wave of productivity improvements, akin to the impact of the original industrial revolution”*
- **Nathan Taylor**, Chief Economist at CEDA: “emerging technologies are the next wave of the industrial revolution and will reshape our economy.”

WHAT DOES THE RESEARCH SAY?

- According to **McKinsey**, less than 5% of occupations will be completely replaced by technology, as much as 45% of the activities people now perform could be taken over by machines
- A study, by **Hugh Durrant-Whyte, Lachlan McCalman, Simon O'Callaghan, Alistair Reid** and **Daniel Steinberg**, and published in CEDA's 2015 report 'Australia's future workforce?' found that:
"40% of jobs in Australia have a high probability of being susceptible to computerisation and automation in the next 10 to 15 years"
- Those deemed least susceptible are jobs in the professions, **technical and creative industries**, and in **personal service** areas such as certain healthcare jobs.

METRA MARTECH RESEARCH TELLS US...

- One million industrial robots currently in operation have been directly responsible for the creation of close to three million jobs
- A growth in robot use over the next five years will result in the creation of one million more high quality jobs globally





A WORKFORCE WITH SUPERIOR SOFT SKILLS

WHAT ARE SOFT SKILLS?

“Soft skills refer to the attributes that help you build relationships and work harmoniously with others. This includes interpersonal, communication, adaptability, creative thinking and relationship building skills.



PROBLEM SOLVING PREDICTED TO BE ESPECIALLY IMPORTANT



Hugh Bradlow
Chief Scientist
Telstra Corporation

“Technology can take over routine tasks – even intellectual ones – but problem-solving is likely to remain a human skill for many decades to come.” You’ll be in a much stronger position in the future job market if you can “understand business problems and craft solutions that address the issues.”

INNOVATION, INSTINCT, INTUITION

- Innovation **can't be programmed** or plugged in, in today's ultra-competitive corporate world, the battle for innovation has never been fiercer
- To be **truly innovative** requires a level of collaboration, idea sharing and creativity that simply cannot be programmed
- Human **instinct** should also be trusted
- While technology can execute strategy, **planning is best left in** the hands of people
- **Natural intuition** cannot be coded
- It's the **emotional** and **human connections** that'll keep customers happy and organisations growing



**A WORKFORCE WITH A HIGH
NUMBER OF STEM SKILLS**

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CSIRO FUTURES



Accelerating the pace of innovation in Australia is critical.

There is a significant opportunity for science and technology to drive positive, disruptive change across new and existing markets

PWC REPORT

Future-proofing Australia's workforce by growing skills in science, technology, engineering and maths (STEM) / April 2015

A smart move



pwc.com.au

STEM knowledge is associated with 75% of the fastest growing occupations, innovations and wage premiums. Shifting just 1% of our workforce into STEM roles will lead to a \$57.4bn increase in GDP over the next 20 years.

SO WHAT WILL THOSE JOBS BE?



FUTURE JOBS & THE JOBS THAT WILL FALL AWAY

JOBS THAT ARE MOST AT RISK FROM COMPUTERISATION BY 2035

Australian jobs most at risk from computerisation and technology in next 20 years

Occupation	Probability of being automated	Number of workers affected
Accounting clerks/bookkeepers	97.5%	263,348
Checkout operators/cashiers	96.9%	128,745
General office administration workers	96.1%	284,171
Wood machinists	93.4%	31,081
Financial and insurance administration workers	93.1%	128,425
Farm, forestry and garden workers	92.5%	106,017
Personal assistants and secretaries	92.4%	137,917
Sales administration workers	91.1%	56,964
Keyboard operators	87.1%	59,852
Hospitality administration and support workers	85.5%	248,862
Sales assistants and salespersons	85.2%	698,780
Real estate sales agents	85.2%	70,673

Australian jobs most at risk from computerisation and technology in next 20 years

Occupation	Probability of being automated	Number of workers affected
Factory process workers	84.6%	52,631
Fabrication trades workers	84.3%	90,039
Receptionists	83.9%	169,371
Clerical and office Support workers	83.8%	114,710
Printing trades workers	82.9%	23,930
Mobile plant operators	82.8%	127,298
Food preparation assistants	82.5%	154,438
Food process workers	82.2%	63,072
Glaziers, plasterers and tilers	81.4%	60,977
Food trades workers	80.7%	173,639
Automobile, bus and rail drivers	80.5%	94,946
Machine operators	80.1%	83,757

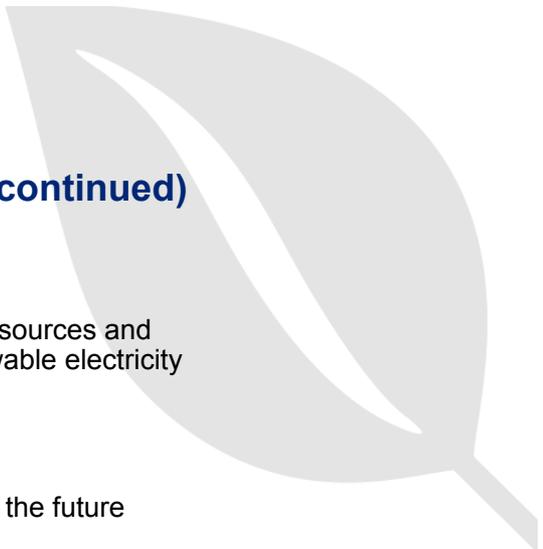
Derived from Oxford University study, PwC analysis

SO WHERE WILL THE JOBS BE IN THE FUTURE?

- **Less than one per cent** chance that doctors, nurses and midwives will lose jobs at due to computerisation and technology in the years ahead to 2035
- The number of Australians aged 65 and over is projected to **more than double** by 2055, when 1 in 1,000 people will be aged over 100
- **Age-related illnesses** will fuel an increasing number of job opportunities
- The **education sector will grow**
- Australia ranks third behind the UK and US on the list of countries forecast to experience the largest growth in **financial services output** between 2010 and 2030



SO WHERE WILL THE JOBS BE IN THE FUTURE? (continued)

- **Green energy** to drive job creation in future
 - **Climate change** will lead to job creation in developing green energy sources and occupations to mitigate the impacts of global warming. Ie new renewable electricity generating plants
 - **Infrastructure** needs will remain
 - **IT professionals** will remain a constant presence in the workforce of the future
- 

LEGAL AND SOCIAL & WELFARE PROFESSIONALS

Australian jobs least at risk from computerisation and technology in next 20 years

Occupation	Probability of being automated	Number of workers affected
Medical practitioners	0.4%	89,754
Education, health and welfare managers	0.7%	75,082
Midwives and nurses	0.9%	301,762
Advertising, Public Relations and sales managers	1.5%	126,616
Database and systems administrators, and ICT Security Specialists	3.0%	34,764
Education professionals	3.3%	56,264
ICT managers	3.5%	57,184
Tertiary-level teachers	3.6%	116,001
School teachers	4.0%	407,693
Engineering professionals	4.2%	132,736
Legal professionals	6.5%	82,552
Social and welfare workers	6.8%	123,933
Accommodation and hospitality managers	7.2%	100,765
Construction, distribution and production managers	8.2%	258,794
Child carers	8.4%	130,510
ICT network and support professionals	9.7%	49,688

Derived from Oxford University study, PwC analysis



**A WORKFORCE WITH MORE
SERVICE SECTOR JOBS**



**A WORKFORCE THAT IS
HIGHLY GLOBALISED**



THE RISE OF THE PEER TO PEER ECONOMY

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GARTNER, INC.

20.8 billion connected things will be in use worldwide by 2020, up from 6.4 billion in 2016. Gartner estimates that the Internet of Things (IoT) will support total services spending of **\$235 billion this year (2016)**





**A WORKFORCE THAT WILL
BE MORE FLEXIBLE**

PROBLEM SOLVING PREDICTED TO BE ESPECIALLY IMPORTANT



Dr Fiona McKenzie
Policy Director
Australian Futures Project

“If employees are scattered across networks and couches...what are the implications for OH&S, cybersecurity and data confidentiality? ...Are we prepared for new capacities in leadership and team management...new ways of managing performance and motivating staff.

Industrial relations implications if the traditional working week – or even a traditional job – becomes a thing of the past? As workforces shrink to a minimum using flexibly employed external service providers..., this may mean a much smaller group of employees will be able to enjoy long-term contracts.”

OUR EDUCATION SYSTEM





**BLIND RECRUITMENT WILL
BECOME THE NORM**

HAYS & INSYNC



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worldwide

GENDER DIVERSITY WHY AREN'T WE GETTING IT RIGHT?

Research and insights that impact your world of work.

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insyncsurveys
Inspiring change™

Unconscious gender bias in hiring decisions

Hypothetical Sales Manager role
CV of 'Susan' - 500+ hiring managers
CV of Simon - 500+ hiring managers

The findings showed
Female respondents said 'Susan' matched more attributes needed for the job than Simon
Men respondents said 'Simon' matched more attributes than 'Susan'
....both genders more likely to hire Simon.

UNCONSCIOUS BIAS

- May 2016 **Victorian government** announced blind recruitment trial in order to counter unconscious bias
- June 2016 **The Australian Bureau of Statistics (ABS)** announced doubling its proportion of women in senior roles in a matter of months after changing its recruitment practices
- We expect to see **more organisation looking** to remove any conscious or **unconscious bias** from the hiring process in order to create a more diverse workforce

THE FUTURE OF THE WORKFORCE

DIVERSE

HOUR GLASS SHAPED

SHARE ECONOMIES

DIGITALLY LITERATE

VIRTUAL WORLDS EVERYWHERE

SOFT SKILLS VALUED

FLEXIBLE

GLOBALISED

STEM SKILLS ESSENTIAL

...AND ALL ASPECTS OF THE WORKFORCE CONSTANTLY & RAPIDLY EVOLVING

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