

# The Future of Work

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WHAT DO YOU SEE  
YOURSELF DOING IN  
10 YEARS?

WORK THAT CAN'T BE  
DONE BY A ROBOT



# Why the fuss?

“Technology advances, digital connectivity, globalisation, the ageing population and the rise of new economic structures are creating a ‘perfect storm’ for jobs and employment models over the next 20 years”

Hajikowicz, S. et al (2016) Tomorrow’s Digitally Enabled Workforce, p17

# Session outline

What are the megatrends?

What are the expected impacts of these megatrends?

What does this mean for local government?

What does this mean for L & D?

# Trend 1: Technological advances

## Exponential growth in

Device connectivity

Data volumes

Computing speed

Automated systems

Artificial intelligence



## Impacts

Adoption of robotic devices

Use of sensors to automate tasks

Big data analysis

Flexible work locations

## Trend 2: Porous boundaries

**Growth in**

**Peer-to-peer economy**



**Impacts**

**Organisational structures  
shrink to core staff,  
supplemented by  
freelancers**

**Jobs of the future to be  
more flexible, agile,  
networked and connected**

**Increased demand for co-  
working spaces**

## Trend 3: Era of the entrepreneur

**Growth in**

**Entrepreneurial skills will  
be needed by small  
business founders and  
employees in large  
organisations**



**Impacts**

**Individuals will require  
entrepreneurial skills and  
appetitudes**

## Trend 4: Divergent demographics

### Growth in

Australia's ageing  
population

Life expectancies

Chronic and lifestyle  
diseases

Prevalence of mental  
health disorders

Migrants of working age



### Impacts

Retirement ages to be  
pushed back

More culturally diverse  
employee profiles

Health and wellbeing to  
feature more prominently  
in HR strategies



## Trend 5: The rising skills bar

### Growth in

**Complexity of tasks  
created from increased  
use of automated systems**



### Impacts

**Many low skilled jobs  
offshored or automated**

**Elevated skills bar for  
entry into many  
occupations**

**Focus on future skills  
required**

**Increased competition for  
jobs in Aust**

## Trend 6: Emerging economies

**Growth in**

**Services industries**



**Impacts**

**Jobs requiring social interaction skills and EI will become increasingly important**

**New expectations of younger generations entering the workforce**

# What does this mean for local government?

## Impact on Jobs

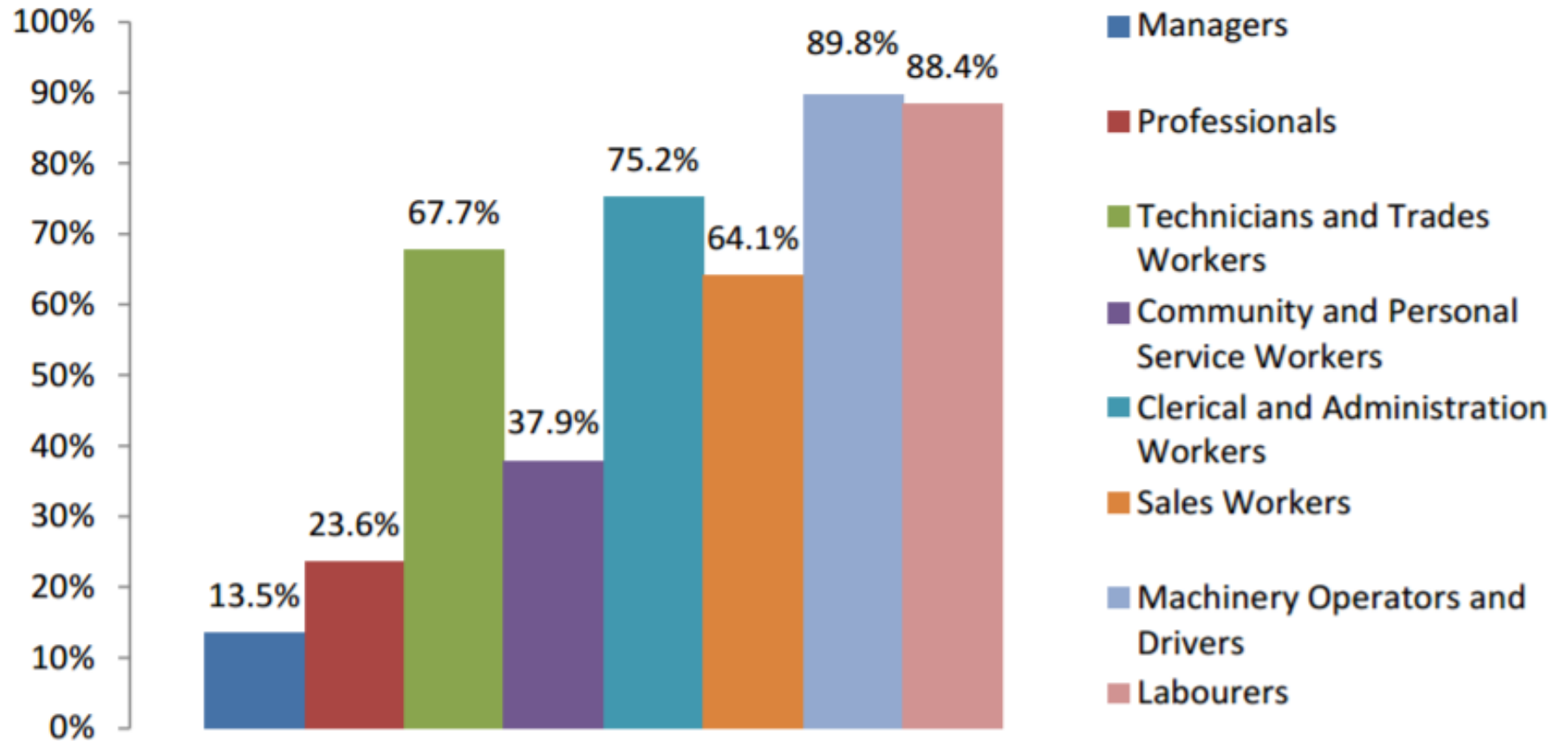
40.9% of NSW jobs are in the **highest risk category** of being computerised within the next 10-15 years

**= 20,450 council positions**

Source: Angus. C. (2015) Future workforce trends in NSW: Emerging Technologies and their potential impact

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## Probability of computerisation in NSW



# Scenarios in local government

- Driverless vehicles - cars and trucks?
- Robot/remote controlled excavators, water carriers, rollers, backhoes and other large plant?
- Virtual libraries with digital content - administered through a central repository in Australia or another country?
- GPS animal tracking and registrations?
- GPS-based costing to assign project costing (no timesheets or job-costing cards)?
- Water meters that communicate via the Cloud

# Scenarios in local government

- Sensors placed on bridges (and other structures) that alert council to changes in the condition of the asset?
- On-line council meetings in real-time, with twitter feeds coming in from the community?
- Voice activated knowledge experts to retrieve information and answer questions e.g. award or legislative interpretations, council minutes, local laws, and providing general advice about managing a team, chairing a meeting, or getting ready for a performance review meeting?
- Robots accessing confined spaces and digging trenches?

# Impact on workplace culture and workforce planning

Councils need to:

- **Forecast job transition requirements**
- **Change perceptions about the ‘right’ person for the job**  
– to adapt to a more dynamic, fluid and changing employment market
- Create a “**compelling employee experience**” – physical environment, technologies to enable productivity, flexibility and learning opportunities – to attract and retain talent



# Impact on workplace culture and workforce planning

- **Offer tapered retirement models** – to harness the skills of an aged population and create positions for younger employees
- **Contribute to improving workforce participation in vulnerable demographics** – particularly for low-skilled, male workers

# Future skills and training

Focus on skills unlikely to be replaced by automation:

- STEM (Science, Technology, Engineering, Maths)
- Digital skills
- Creativity, problem solving, advanced reasoning, complex judgement, social interaction and emotional intelligence
- Adaptability, resilience
- Entrepreneurial capabilities
- Communication
- Teamwork (including team intelligence)

# Opportunities and risks

## Opportunities for councils

Enhanced service delivery

Employment generation

More flexible work practices

Innovative leadership

## Risks – societal & organisational

Unemployment/job loss

Inequality

Job insecurity

Community backlash

# Your thoughts?

# How is your council preparing for the future?

# References

- Angus, C. *Future workforce trends in NSW: Emerging technologies and their potential impact*, NSW Parliamentary Research Service, Briefing Paper no 13/2015
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