

KONEKT

Working To Create Wellness
Opportunities ahead

Meet George Jetson!



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In the world of work, change is the only constant!



What will work look like in 2030?

Three big megatrends that will have global impact on attitudes and behaviour in relation to work:

- Changing demographics
- Digitization and “BIG” data
- Use of automation and artificial intelligence

Megatrend 1 - changing demographics

Australia's Aging Population (based on ABS Census of Population and Housing 2016)

- Proportion of Australian population aged over 65 increasing – 1911; 1:25 (4%), 2011; 1:7 (14%) and 2016; 1:6 (16%)
- Aging population trending upwards in OECD countries but varies greatly from 25% of Japanese population to 6.5% of Mexican population [*OECD \(2017\), Elderly population \(indicator\)*](#). Australia ranked 21st oldest country out of 31 OECD countries in 2013
- Tasmania has the highest proportion of people over 65 at 19% and the Northern Territory the lowest at 7.2%
- Proportion of over 65's in the labour force increasing exponentially from 9.4% in 2006 to 14% in 2016
- 1 in every 5 people aged between 65 and 74 years (21%) was in the labour force in 2016
- Older men more likely to be in the work force than older women (18% compared to 10%) and more likely to be working fulltime (49% compared to 29%)
- Top 5 occupations by participation for males over 65 are livestock farming, truck drivers, sales assistants, bus and coach drivers and crop farmers
- Top 5 occupations by participation for females over 65 are sales assistants, general clerks, registered nurses, livestock farmers and receptionists



How do we work towards wellness in an aging population?

- Organisations must commit to providing life-long learning to their employees, so that older workers have the skills to keep pace with the changes in workplace environments that we know are increasing in magnitude
 - Workplace flexibility in the design and structure of work will be key in accommodating an aging workforce – part time work, mobile work and greater capacity for leave/breaks
 - In Australia particularly, given the manual nature of the types of employment that older workers currently largely find themselves in, consideration needs to be given to the areas of employment that will offer alternative, less-manual work or growing opportunities for employment
 - Monitoring of health in the workplace and particularly of co-morbid, non-work related conditions that increase an older worker’s likelihood of not staying well at work, needs to be a natural part of workplace health and safety rather than the current “work-related” and “non-work related” delineations
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Megatrend 2 - **BIG** data

Put simply, big data is larger, more complex data sets, especially from new data sources. These data sets are so voluminous that traditional data processing software just can't manage them. But these massive volumes of data can be used to address business problems you wouldn't have been able to tackle before

- **Volume** The amount of data matters. With big data, you'll have to process high volumes of low-density, unstructured data. This can be data of unknown value, such as Twitter data feeds, clickstreams on a webpage or a mobile app, or sensor-enabled equipment. For some organizations, this might be tens of terabytes of data. For others, it may be hundreds of petabytes
- **Velocity** is the fast rate at which data is received and (perhaps) acted on. Normally, the highest velocity of data streams directly into memory versus being written to disk. Some internet-enabled smart products operate in real time or near real time and will require real-time evaluation and action.
- **Variety** refers to the many types of data that are available. Traditional data types were structured and fit neatly in a relational database. With the rise of big data, data comes in new unstructured data types. Unstructured and semistructured data types, such as text, audio, and video require additional preprocessing to derive meaning and support metadata.

The web is about to get a whole lot busier - welcome to the **Zettabyte** age
Infographic



You would need **1 BILLION** one terabyte hard drives to store 1 zettabyte of data

It's equivalent to
250 billion DVDs

1 ZETTABYTE

= 1,000,000,000,000,000,000 bytes

Annual global IP traffic predicted to pass this threshold by the end of

2016

Sources: Cisco Visual Networking Index Global IP Traffic Forecast and Service Adoption, 2013-2018 and TechTerms.com

How does BIG data affect work?

- **Cost Savings** : large amounts of data can be stored and used to find more efficient ways of doing business
- **Time Reductions** : with the high speed of in-memory analytics new sources of data can be identified quickly which helps businesses make quick decisions based on the learnings
- **New Product Development** : By knowing the trends of customer needs and satisfaction through analytics new products can be created according to the wants of customers
- **Understand the market conditions** : By gaining better understanding of current market conditions. For example, customer purchasing behaviours
- **Control online reputation**: big data tools can do sentiment analysis. Feedback about a company from customers, employees and service providers is immediately available and a

<https://www.newgenapps.com/blog/importance-benefits-competitive-advantage-big-data>

Big data's contribution to workplace wellness

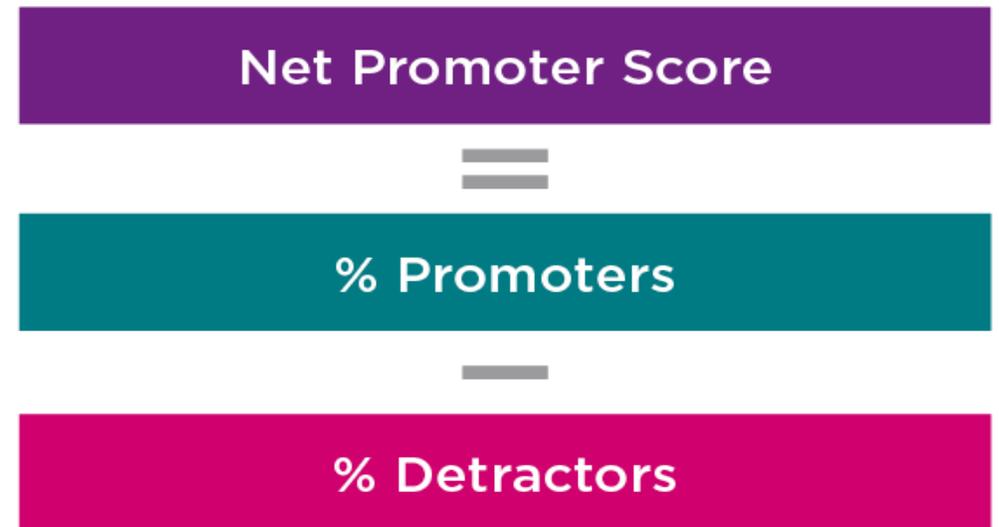
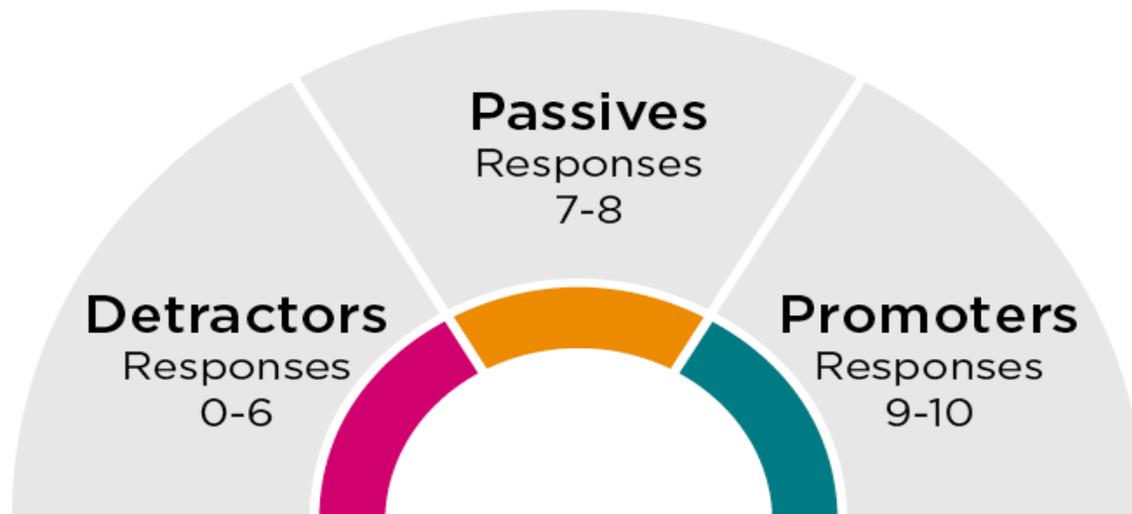
- What people think, matters, with consumer-directed choice the hallmark of all businesses and particularly healthcare and human services industry
- Can be used to monitor employee well-being if done so in a culture of care and trust and with the intent to change those things that are impacting employee workplace wellness
- Gathering safety information in the workplace such as incidents/injuries, near-misses and types, inspections/observation information and the observer, the severity of at-risk actions, late fixes, and evaluation of the observer's collection patterns can be combined using big data analysis techniques to provide predictive capabilities that can potentially eliminate many common place workplace injuries
- In a similar way, motor vehicle accidents and even natural disasters can be predicted and risk ameliorated using the predictive analytical capacities of big data

The NDIS's progressive welfare approach puts choice and control in the hands of consumers (or their nominated carers). Subject to an approved plan, a participant may select the assistance they believe will better help them achieve their goals, by choosing among competitors in the marketplace, or even available service providers with other specialisations.

*FROM FULFILLING THE LIFE POTENTIAL OF AUSTRALIANS WITH A
DISABILITY THROUGH CUSTOMER-DIRECTED CHOICES (14 March 2019),
University of SA, Institute for Choice*

Consumer directed choice – the iCare example

Net Promoter Score (NPS) is a business metric that measures our customers' experience with icare. NPS helps icare and its business partners to understand and be accountable for how we engage with our customers, the workers and employers of NSW. The central NPS question is: "How likely is it that you would recommend our [organisation/product/service] to a friend or colleague?" Respondents answer this question on a scale from 0 to 10, where 0 represents "highly unlikely" and 10 represents "highly likely". The NPS is determined by subtracting the percentage of detractors from promoters (*from @ insurance & care NSW 2019*)



Megatrend 3 – automation and artificial intelligence

- Artificial Intelligence is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages
 - Automation is the technology by which a process or procedure is performed with minimal human assistance
 - About 36 per cent of Australian jobs face a significant or high risk of automation, according to a new Organisation for Economic Co-operation and Development (OECD) report
 - The OECD estimates 14 per cent of existing jobs could disappear over the next 15 to 20 years, and 32 per cent are likely to change radically
 - The roles currently less likely to be impacted by AI will require creativity, artistry and/or emotional intelligence
 - Roles vulnerable to automation include those that are highly manual, highly repetitive and/or administrative in nature
 - “If seized, this opportunity could add \$1.1 trillion to \$4 trillion to the economy over the next 15 years, providing every Australian with \$4000 to \$11,000 in additional income per year by 2030” (McKinsey Report)
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Ten “dinosaur jobs” of the future

- Driving jobs
- Customer Service and Office Assistants
- Healthcare/Medical
- Storepeople and Warehouse Workers
- Assembly Line Roles
- Retail and Customer Interaction Roles
- Lawyers
- Data Entry Clerk
- Telemarketers and Customer Service Officers



“Computers are emotionally illiterate, so people with the most people-focused skills are going to be valued,”

Professor Toby Walsh, AI Group Leader CSIRO, Data61

The future of work: old rules vs new rules

Old rules	New rules
Machines and artificial intelligence are taking over jobs (replacement)	Jobs and tasks are being redesigned to use more essential human skills, and are augmented by technology (augmentation)
Full-time employees are the main source of talent	A continuum of talent is available, including contractors, gig employees, crowds, and competitions
Workforce planning focuses on full-time workforce and skill requirements	The focus in workforce planning shifts to start with work and analyzing options across multiple workforces and technologies
Jobs are relatively static with fixed skill requirements	The half-life of skills continues to decrease rapidly, and work is being constantly reinvented
Jobs and career ladders are the foundation of work and the workforce	Projects, assignments, and tours of duty are building blocks for work; careers are portfolios of projects and experiences
Robotics and cognitive technologies are IT projects	Integrating people and technology is a multidisciplinary task
HR's job in automation is to focus on change management and workforce transition	HR has a strategic role to facilitate and orchestrate the redesign of jobs and train the augmented workforce
The fundamental elements of work are "jobs," with formally developed "job descriptions"	The fundamental elements of work are "tasks," which are aggregated into jobs and roles

Deloitte University Press | dupress.deloitte.com

In summary – working our way towards wellness

Focus points for the future:

- Managing chronic and co-morbid conditions in older workers in order to assist people to stay well at work for longer and working towards “empathetic” role creation or utilisation of soft skills
- Using predictive data to drive the person-centric approach now pervasive throughout international healthcare and social support schemes e.g *sentiment mapping, NPS ratings etc.*
- Use of Megadata and predictive analytics to improve safety, track workplace wellness indicators and shorten the period of worklessness or unwellness at work for an individual
- Employers having a responsibility to help re-skill the vulnerable for the new world of work
- “Soft skills” such as empathy, negotiation and emotional intelligence will become more important and fundamental skills required in the workplace and will need to be fostered to keep workplaces well
- Humans will be undertaking increasingly complex work in increasingly flexible working environments and employers will need to become more agile to accommodate staff

The future state – something to strive for?

“...the rise of a workplace that is mindful, tranquil, sublime and that nurtures the health and performance of the mind.” This conclusion was based on the observation that workers are “turning away from their busy, hyper-connected, digital lifestyles and prioritizing personal fulfilment and well being instead. Workplace care in 2030 will need to deliver a new set of values. Instead of always on, there will be digital invisibility; instead of conversation, there will be contemplation; not only considered, but also sublime spaces; not only considerate, but also quiet companies.”

The Future Workplace: Key Trends That Will Affect Employee Well Being and How to Prepare fro Them Today by Unum and the Future Laboratory

Working our way towards wellness – Any questions?

