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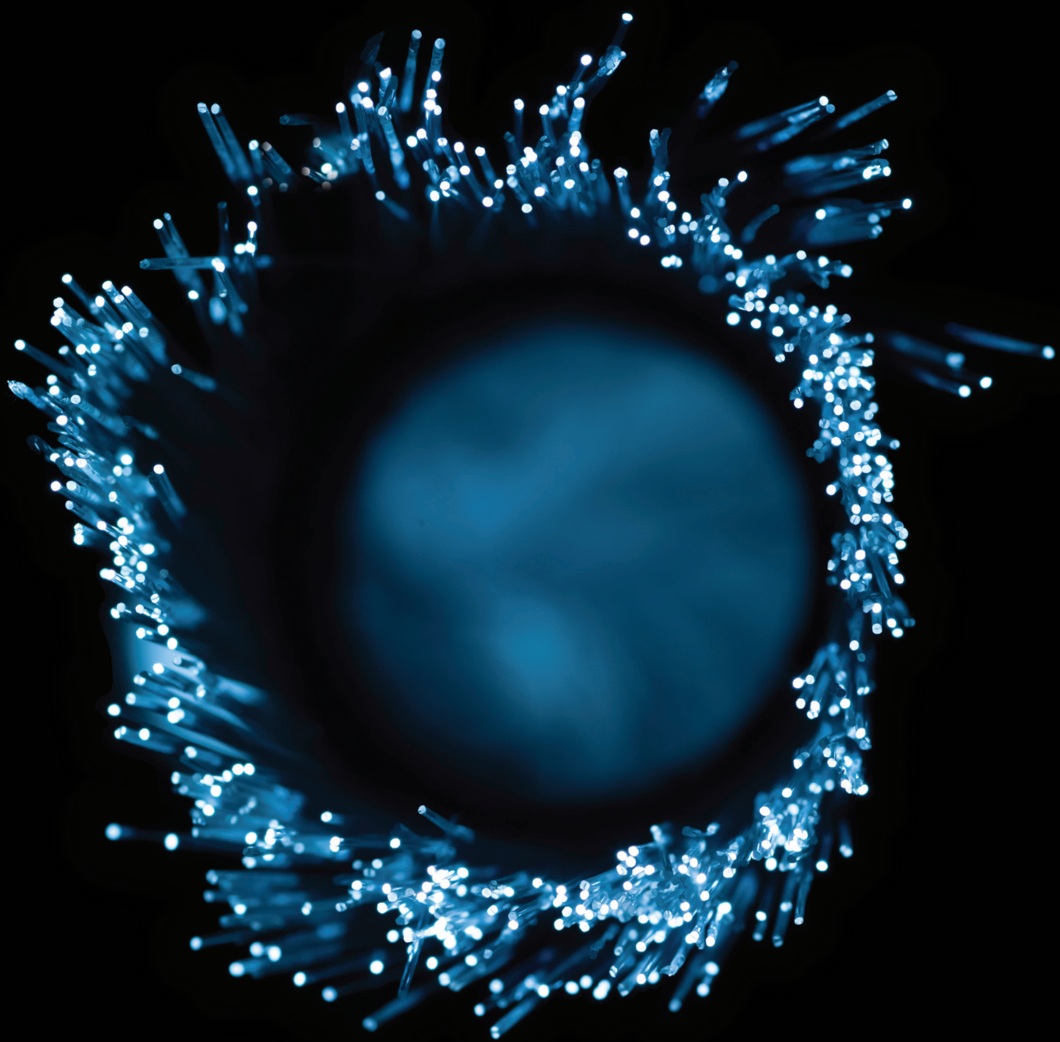


The future of work:
Occupational and education trends in human resources in Australia

Prepared by Deloitte Access Economics, March 2018

Human resources snapshot

218,000

Size of Australia's human resources workforce in 2016-17

Technological and workforce change

is contributing to growing demand for human resources skills

2.3%

Forecast annual growth in human resources workers between 2016-17 and 2021-22
(compared to 1.5% p.a. for overall Australian workforce)

$160,132

Forecast income of human resources workers with postgraduate qualification* in 2021-22

* Postgraduate qualification in Management and Commerce field of education.

With employees becoming more mobile across their careers, and technology disrupting all industries and business functions, the role for human resources is growing increasingly critical within the workplace.

Around 40% of current Australian jobs have a high probability of being automated in the next 10-15 years.

– Durrant-Whyte et al., 2015

The increased pace of workforce change is contributing to growing demand for human resources professionals with a diverse range of skills who can adapt to these changes as required. An important role for the human resources area will be to provide both strategic and practical support to deliver improved workforce outcomes, with a particular focus on the impact of digital technology on the workforce.

In this context, Deloitte Access Economics has been commissioned to examine how occupational and education trends are developing across the human resources workforce in Australia. This report seeks to provide forward looking insights on how the nature of work and study in human resources are evolving as a result of ongoing changes to the economic, business and labour market landscape.

The research presented in this report has been developed through a mix of analysis of publicly available data and information sources, targeted consultations with academics and university program directors, and employment forecasting using Deloitte Access Economics' macroeconomic modelling framework.

How are broader trends specifically affecting the human resources area?

Technology driving disruption

The human resources area has traditionally been allocated a broad remit within an organisation, including organisation-wide strategy execution, administrative efficiency, employee contribution and capacity for change. With technological developments driving significant change in all of these areas across most industries, there has been an increased role for human resources in managing the transition within organisations. In this context, the structural change that is being facilitated by digital disruption has wide-ranging implications for the human resources workforce.

Previous research has found that **around 40% of current Australian jobs have a high probability of being automated in the next 10-15 years (Durrant-Whyte et al., 2015), and technologies such as artificial intelligence have the ability to disrupt even advanced cognitive roles, such as in the medical, legal and engineering professions.** These waves of change mean that organisations may need to rapidly adapt to new business needs, such as by adding new capabilities and functions and/or retraining existing employees to redeploy to other parts of the company. The human resources area can play an important function in facilitating a smooth transition in organisational restructures that involve the addition of new roles alongside the removal of established roles, particularly since there are significant risks and business costs associated with poor management of redundancies and employee displacement (CPA, 2016).

Furthermore, the pace of organisational change is increasing not only in private companies, but also in the public sector. According to Jacqui Curtis, Deputy Commissioner at the Australian Tax Office, **"these challenges are driving a degree of 'messiness' in the workplace and will require human resources professionals, now and in the future, to think hard about how they best bring value to the issues for which they have responsibility.** Providing both strategic and practical support for leaders to deliver improved workforce outcomes will be human resource's key role in the years ahead" (Australian Human Resources Institute, 2015).

Ethical business practices

Another workplace trend that is creating increased demand for human resources skills is the heightened focus on corporate and social responsibility in the Australian business landscape, with a number of highly publicised recent examples of corporate misconduct from household brands (Ferguson, 2016). Companies are increasingly expected to implement and report on ethical approaches to doing business, both externally in relation to customer engagement and conduct, as well as internally with respect to employment law and organisational practice.

As outlined in Box A, human resources professionals can play a critical role in upholding ethical business practices and ensuring that employees are committed to integrating corporate responsibility throughout an organisation's operations. According to Jonny Gifford, research advisor to the Chartered Institute of Personnel and Development, "human resources [professionals] need to make sure people management practices are ethical and secondly, to embed corporate responsibility you need to give people the right support and training and human resources has a role in the learning and development side of that" (Higginbottom, 2014).

Box A: Drivers of growing demand for human resources skills

The human resources area has a broad range of applications in facilitating and managing organisational change, and human resources skills and qualifications are therefore demanded across all sectors of the economy. As part of our research, Deloitte Access Economics spoke with Dr Alan Montague, the Program Director of Human Resources Management at RMIT University, about the career prospects of individuals studying a postgraduate qualification in the human resources area.

Alan suggested that there are two key drivers of growing demand for human resources management skills and qualifications. First, the significant technological change that is arising from developments such as artificial intelligence and machine learning means that **businesses across all industries will need more change management and human resource development/training skills to facilitate successful transitions,** particularly given the potential magnitude of future workplace disruption. Second, there is an increasing focus on ethical approaches to conducting business across many sectors of the Australian corporate landscape given the litany of misdemeanours we read about in the media. Given this major concern, **human resources professionals must perform a more prominent role as the ethical centre of organisations** by developing and implementing the necessary internal and external organisation policies.

Overall, the skills required in human resources professionals go beyond knowledge of human resources management theory; Alan identifies interpersonal, communication and problem-solving skills as being critical for success, noting that workers in the human resources area need to be able to apply concepts on organisational performance, governance and employment law within the workplace. He believes that it can be challenging to develop these skills in a classroom environment and that other learning approaches such as work-integrated learning are valuable in this context.

Changing tools and resources

The tools that are used by human resources professionals are also changing as a result of technological innovations. For example, the training and development function of the human resources area is being disrupted by the increasing availability of 'on-demand' learning experiences, such as through massive open online courses (MOOCs), podcasts and video tutorials. As a result, corporate learning programs are evolving to effectively utilise these resources in a manner that promotes a more self-directed approach to employees' learning (Deloitte, 2016).

A range of digital tools are also affecting other areas across the broad range of human resources functions, such as the use of technology to improve the employee experience, end-to-end talent management platforms integrated with payroll and performance systems, and the application of data analytics to improve employee engagement and retention (Deloitte, 2016). The skills required of individuals working in the human resources area therefore include a mix of theoretical foundations, as well as the critical thinking and collaboration skills necessary to adapt and succeed in such a dynamic workplace environment.

Which human resources occupations are relevant for our analysis?

In order to provide a snapshot of the workforce growth potential associated with the human resources area, Deloitte Access Economics has identified a series of occupations that could represent job opportunities for workers with skills and qualifications in the human resources field.[1]

Since our research aims to evaluate further study in the human resources area, the specified occupations are targeted towards roles that would be suitable for employees who have completed postgraduate study, rather than entry-level roles with lower skills and qualification requirements.

The following occupations have been identified using the Australian and New Zealand Standard Classification of Occupations (ANZSCO) as representing potential employment opportunities in the human resources area:

- Human Resource Managers
- Policy and Planning Managers
- Human Resource Professionals[2]
- Training and Development Professionals
- Management and Organisation Analysts.

The analysis that follows on future workforce growth and the benefits of further study in the human resources area are based on this list of occupations. We note that while these occupations have been identified on the basis of being relevant to job opportunities for individuals with human resources skills and qualifications, not every worker employed in these occupations will necessarily have a specific human resources qualification. This list of occupations therefore outlines the broad pool of potential employment opportunities in the human resources area across different parts of the workforce, rather than a one-to-one representation of the jobs that employ human resources graduates.

The training and development function of the human resources area is being disrupted by the increasing availability of 'on-demand' learning experiences.

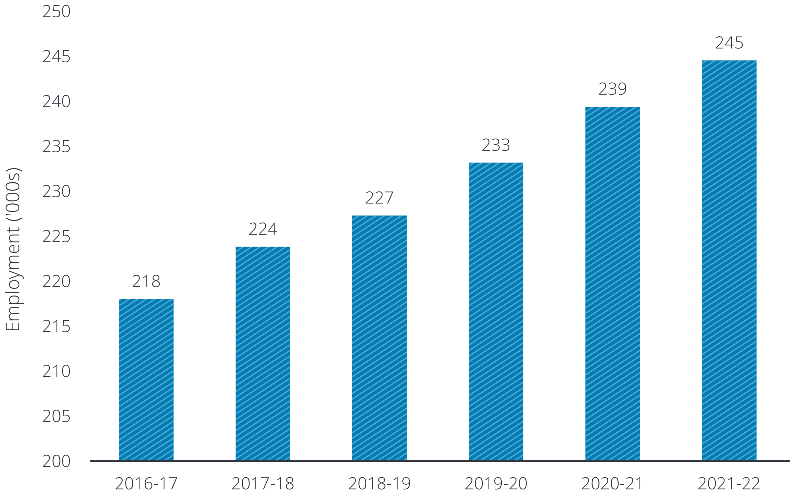
1. The occupations have been identified at the 4-digit level based on the Australian Bureau of Statistics' detailed occupation descriptions in the *Australian New Zealand Standard Classification of Occupations: First Edition* (ABS 2006), as well as consultation with university academics and subject matter experts, and research published by relevant industry associations and other publicly available materials.

2. According to the ANZSCO definitions, Human Resource Managers direct and control human resource and workplace relations activities, while Human Resource Professionals develop and evaluate staff recruitment, resolve workplace disputes and represent various stakeholders in employment-related negotiations.

What is the future growth potential of the human resources workforce?

The Australian human resources workforce is forecast to see sound growth in the next five years. Aggregating the human resources occupations identified above, Deloitte Access Economics projects the relevant workforce will grow from 218,000 persons in 2016-17 to 245,000 persons in 2021-22, an increase of around 27,000 workers at an annual average growth rate of 2.3% (Chart 1).[3]

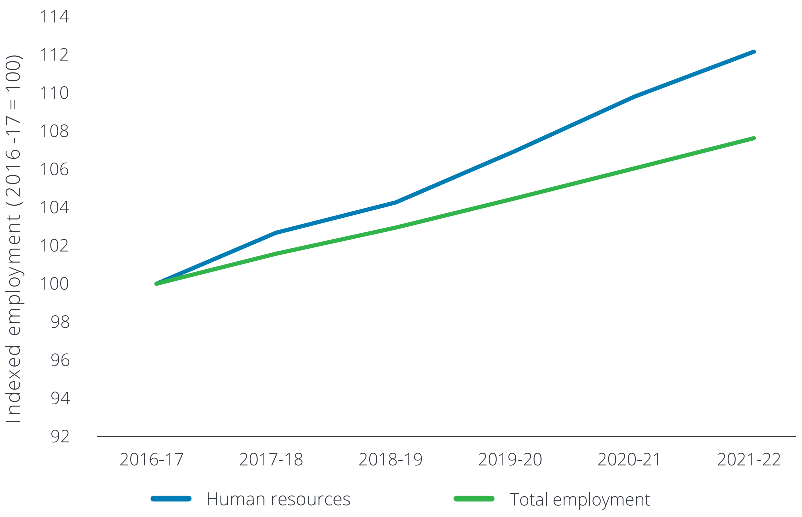
Chart 1: Human resources employment forecasts, 2016-17 to 2021-22



Source: Deloitte Access Economics (2017)

The human resources workforce is expected to see stronger growth than the Australian labour force as a whole, where employment is forecast to grow at an average of 1.5% per annum over the next five years (Chart 2).

Chart 2: Human resources employment and total employment, 2016-17 to 2021-22



Source: Deloitte Access Economics (2017)

3. The human resources workforce forecasts for this report have been produced using the Deloitte Access Economics' Macro (DAEM) modelling framework, a macroeconometric model of the Australian economy. For the purposes of this research, employment projections at the 4-digit ANZSCO level have been smoothed using a three-year moving average, in order to provide workforce forecasts that are more reflective of trend jobs growth.

Table 1 provides a breakdown of Deloitte Access Economics' employment forecasts for the human resources workforce by the component occupations. Demand for human resource professionals is expected to grow by almost 8,000 people over the next five years, at an annual growth rate of 2.5%. The forecast growth rate is strongest for policy and planning managers, where average annual growth is forecast to be a robust 4.0%. The overall positive outlook for labour market demand in these human resources occupations is expected to be supported by the increasing roles played by human resources professionals in organisational change management and corporate social responsibility.

Demand for human resource professionals is expected to grow by almost 8,000 people over the next five years.

Table 1: Human resources employment forecasts by occupation, 2016-17 to 2021-22

Occupation	**2016-17 (000s)**	**2021-22 (000s)**	**Change in employment (000s)**	**Average annual growth rate (%)**
Human Resource Managers	51.1	57.4	6.3	2.4%
Policy and Planning Managers	21.2	25.7	4.5	4.0%
Human Resource Professionals	60.9	68.8	7.9	2.5%
Training and Development Professionals	23.7	24.4	0.7	0.6%
Management and Organisation Analysts	61.1	68.1	7.0	2.2%
Total Human Resources	**218.0**	**244.5**	**26.5**	**2.3%**

Source: Deloitte Access Economics (2017)

A recent Australian Human Resources Institute survey found that although almost 30% of its members already hold a Master's degree, over half of these human resources professionals believe that they will need to pursue further education to prepare for future changes in the workplace environment.

How can further study benefit workers in human resources occupations?

Increased earning potential

Conventional economic theory suggests that workers who undertake further study are able to realise higher wages in the labour market. From a human capital perspective, education is an important determinant of the overall productivity of labour, which is then reflected in the wages paid to individual workers. The knowledge and skills derived from education represents an increase in human or intellectual capital, leading to more productive workers who are financially rewarded for their increased efficiency. Furthermore, signalling theory suggests that further study can be a means for individuals to 'signal' their capability to employers, as more capable individuals may be more successful in completing their education.

Recent Deloitte Access Economics research has estimated the impact of a postgraduate qualification on wages, controlling for other factors which may also contribute to earnings differentials at the individual level (such as demographics and experience). While this study did not specifically examine the wages earned by human resources workers, it found that a significant wage premium is attained by workers who have completed postgraduate study in the broader Management and Commerce field of education.[4] Across all workers who studied Management and Commerce at the postgraduate level, an undiscounted lifetime wage premium of 48% relative to workers with no post-school qualifications was found to be directly attributable to having completed the postgraduate qualification (Deloitte Access Economics, 2016).

Looking specifically at the occupations previously identified in the human resources workforce, data from the latest Census suggests that the average annual income earned by postgraduate-qualified workers who studied Management and Commerce in these occupations was $137,324 in 2016-17. In raw terms – without accounting for other factors such as demographics and experience – this was 49% higher than the average 2016-17 income of workers employed in human resources occupations who have no post-school qualifications. **The average annual income of human resources workers with a postgraduate qualification in Management and Commerce is forecast to increase over the next five years, rising to $160,132 in 2021-22.[5]**

Broadening career pathways

Further to the increased earning potential, additional study in the human resources area can enable workers to upskill in new and relevant fields, facilitating future career progression and opening up a diverse range of employment opportunities. A recent Australian Human Resources Institute survey found that although almost 30% of its members already hold a Master's degree, over half of these human resources professionals believe that they will need to pursue further education to prepare for future changes in the workplace environment. Almost nine out of 10 expressed confidence that they will be able to acquire the skills needed to meet future challenges (Australian Human Resources Institute, 2017).

Our research also finds that further study can benefit human resources professionals by developing a broader skillset through the combination of human resources theory and practice, enabling these employees to take on a greater range of more complex responsibilities within their organisation. As outlined in Box B, a postgraduate qualification in human resources combined with work experience and/or a previous industry-specific qualification can also be advantageous with respect to accelerating career progression in human resources management within a particular organisation or industry.

4. Management and Commerce has been identified as the most relevant field of education for human resources qualifications. The Management and Commerce field of education is represented at the 2-digit level in the Australian Standard Classification of Education (ASCED).

5. Future income has been estimated using annual Wage Price Index growth forecasts from the September 2017 *Business Outlook* (Deloitte Access Economics, 2017).

Box B: Human resources qualifications and career applications

Our consultation with Dr Alan Montague from RMIT University suggests that studying a postgraduate qualification in human resources management can help to build on the skills and knowledge developed through undergraduate study and work experience, and can potentially provide opportunities for individuals to apply these skills in changing workplace settings. In this context, Alan believes that applied teaching methods such as work-integrated learning and authentic case studies aligned to what occurs in workplaces can be extremely valuable to students in human resources, by enabling them to develop a practical understanding of how the academic theory can be implemented in solving real-world problems. This could include, for example, case studies in designing and implementing a recruitment strategy that accounts for an organisation's changing skill requirements due to technological change, or applying adult learning principles to develop a training program to meet the needs of a particular organisation's current or emerging workforce.

At the same time, further study in the human resources field is also undertaken by workers who are currently employed in other roles, since human resources management is relevant across all workplaces and industries. Alan notes that a postgraduate qualification in human resources management provides an advanced understanding of concepts and frameworks which can be used as a lever to enter the human resources area within their sector of expertise, or be promoted. A combination of relevant industry experience and the completion of further study in human resources can facilitate future career development and assist in accelerated progression in the human resources area across a diverse range of industries (such as health, construction, law, government and engineering).

Work-integrated learning and authentic case studies aligned to what occurs in workplaces can be extremely valuable to students in human resources.

– Dr Alan Montague,
RMIT University

What are the key takeaways for current and future human resources workers?

- An increased focus on organisational change management (in the context of technological and workforce change) and corporate social responsibility is contributing to growing demand for human resources skills.
- This is expected to drive future growth in the human resources workforce, increasing from 218,000 persons in 2016-17 to 245,000 persons in 2021-22. The average annual growth rate of 2.3% is stronger than the 1.5% per annum growth forecast for the entire Australian labour force.
- Across workers who have completed a postgraduate qualification in Management and Commerce, a lifetime wage premium of 48% (relative to workers with no post-school qualifications) is directly attributable to their qualification.
- The average annual income of human resources workers with a postgraduate qualification in Management and Commerce was $137,324 in 2016-17, and this is forecast to rise to $160,132 in 2021-22.
- Further study in the human resources area can also provide workers with opportunities to upskill through a mix of theory and practice, and enable individuals working in other functions to develop an advanced understanding of human resources management.

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