FORCES SHAPING THE FUTURE OF WORK IN A CHANGING REGIONAL ECONOMY

Michelle Smidt

School of Management, QUT Business School, Queensland University of Technology, Brisbane, QLD, 4001, Australia. Email: <u>m.smidt@qut.edu.au</u>.

Karen Becker

Associate Professor, School of Management, QUT Business School, Queensland University of Technology, Brisbane, QLD, 4001, Australia. Email: <u>karen.becker@qut.edu.au</u>.

Lisa Bradley

Professor, School of Management, QUT Business School, Queensland University of Technology, Brisbane, QLD, 4001, Australia. Email: <u>lm.bradley@qut.edu.au</u>.

ABSTRACT: This paper presents research which examined perceptions on the future of work in Queensland. It highlights the major drivers of change including: changing technology, demographics, increasing globalisation and economic shifts. Focus groups were conducted and findings show that Queensland businesses are acutely aware of the coming changes, but are less certain about how to respond. Current good practices plus recommendations for the future – particularly the lead role government and industry bodies need to play – are discussed. These recommendations will support Queensland businesses to thrive and adapt to the forces shaping work in this changing regional economy.

KEY WORDS: Changing Employment, Human Capital, Focus Groups, Queensland

ACKNOWLEDGEMENT: This paper is based on research conducted as part of a commercial research project investigating 'The Future of Work' funded by Davidson Consulting, Brisbane QLD Australia.

Smidt et al.

1. INTRODUCTION

Australia is seeing a marked shift in the industries that make up its economy with manufacturing, mining and agriculture declining while health care, education and professional services industries are experiencing growth (Australian Government, 2015b). Consequently, the main occupations are also changing with professionals, community and personal workers, as well as managers, estimated to be the three strongest growing professions in the coming years (Australian Government, 2014). In addition, it has been claimed that up to forty per cent of the current jobs in Australia could be replaced by technology within the next two decades (Committee for Economic Development Australia, 2015). These changes are no doubt going to affect regional economies, the businesses within them and the workforces required. However, the impact and therefore the required actions may be different for businesses operating in diverse regions.

Queensland is one region heavily impacted by structural changes in the economy due to a historical reliance on the resources sector, especially mining, which has declined significantly in recent years (Queensland Treasury and Trade, 2013). Furthermore, Queensland employees account for 20.1 per cent of the total Australian employment (Queensland Government, 2015a). According to the Australian Government Department of Employment, Queensland is predicted to have the second strongest growth in employment looking ahead to November 2018, only surpassed by NSW (Australian Government, 2014), making it a significant contributor to the Australian economy. However, the changing nature of the economy in Queensland, particularly the decline in resources, would indicate that this employment growth will not be experienced in the traditional sectors of the labour force and that further work is needed to understand what work will be like in the region going forward. This research attempts to contribute to this understanding.

2. FORCES IMPACTING EMPLOYMENT OF THE FUTURE

Industry groups, economic associations and consulting firms have been prolific in exploring the changing nature of work and jobs, and predicting requirements of the future workforce (AHRI, 2011; Boston Consulting Group, 2007; Committee for Economic Development Australia, 2012; 2015; Deloitte and AMP Capital, 2013; McKinsey Global Institute, 2012; PricewaterhouseCoopers, 2011; 2012). Whilst there are a wide range of issues that might be considered when trying to understand forces that are

changing the nature of work and employment, there are a number of common themes that tend to dominate. However, in much of the literature these changes are discussed in the broadest sense and there is limited evidence of these being considered in the context of specific regions, where there may be particular economic circumstances leading to unique workforce requirements or challenges. Whilst there are studies focusing on regional employment trends particularly looking at longitudinal employment data in specific regions (Arntz *et al.*, 2014; Fingleton *et al.*, 2012; Noseleit, 2012), there is less focus on understanding the lived experiences behind such trends and the ways in which businesses are preparing to engage a workforce that may be considerably different to the past. Although many forces for change have been noted, four areas appear consistently throughout the literature, namely, Demographics, Technology, Globalisation and Economy. A more detailed description of each of these themes follows.

Demographics

The most common issue discussed in the broader literature is the changing demographics of the workforce, encompassing a number of aspects such as the change in expectations of younger generations, ageing, and diversity. Generational factors are a large focus and are claimed to be an issue impacting on organisations now and into the future (Australian Government, 2013; 2015b; Galinsky and Matos, 2011; Gratton, 2010; Hannon, 2011; Humphry, 2014; Khallash and Kruse, 2012; Melchor, 2013; Mortensen and Vilella-Vila, 2012; Roodin and Mendelson, 2013; Wilson, 2013).

Reportedly new generations hold a different set of expectations from the previous as they seek more flexibility, faster promotions, challenging tasks, more autonomy, inclusion in decision-making, and more inclusive management styles and managers (Eversole *et al.*, 2012; Hannon, 2011; Hines, 2011; Hines and Carbone, 2013). Understanding these changing expectations is important for attracting and retaining human capital, a critical component of competitive advantage (Eversole *et al.*, 2012; Ruona and Coates, 2012).

Another demographic issue is the increasing average age of the workforce (Australian Government, 2015b; Galinsky and Matos, 2011; Khallash and Kruse, 2012; Leicht, 2010; Melchor, 2013; Mortensen and Vilella-Vila, 2012; Phillipson, 2013; Wilson, 2013). The ageing workforce leads to the need for planning by businesses to accommodate

the large scale exit of their most experienced talent. In particular, there is emphasis on planning to retain and utilise the often critical knowledge these employees possess (Roodin and Mendelson, 2013). Moreover, the ageing of the workforce also places pressure on organisations to adapt and implement new practices to meet both the physical and lifestyle needs of older employees in order to extend their working lives (Galinsky and Matos, 2011; Roodin and Mendelson, 2013). The issue of an ageing workforce, together with new generations entering the workforce, have led to calls for consideration concerning how organisations best manage conflicting needs and expectations of various age groups (Eversole *et al.*, 2012; Hannon, 2011; Hines, 2011; Roodin and Mendelson, 2013).

In addition to age diversity, gender and cultural diversity are two further demographic factors impacting on organisations (Khallash and Kruse, 2012; Mortensen and Vilella-Vila, 2012; Roodin and Mendelson, 2013). Increasingly women are entering and remaining in the workforce, which means childcare has become an issue for organisations and governments alike (Khallash and Kruse, 2012; Mortensen and Vilella-Vila, 2012). The provision of greater flexibility to allow for caring responsibilities is also a concern (Khallash and Kruse, 2012; Roodin and Mendelson, 2013). Furthermore, in some areas, increasing cultural diversity is also becoming a reality due to a rise in migration (Khallash and Kruse, 2012).

In summary, the demographics of the workforce are changing, requiring a change to the way work is structured and organised. It is likely, however, that particular regions may experience the changes to varying degrees depending on the extent of migration and the current and future demographics of the region.

Technology

Technology is overwhelmingly seen as a critical factor impacting on work of the future. Indeed, it is predicted that many current roles will be replaced by technology and that others will arise driven by technological advances (Committee for Economic Development Australia, 2015). It is argued that emerging technologies are impacting organisations in profound ways by enabling the automation of an increasing number of both low skilled and increasingly skilled positions (Brown and Lauder, 2013; Hines and Carbone, 2013; Khallash and Kruse, 2012). This is changing the nature of both blue and white collar work. As a result, organisations may need to redevelop internal work processes, both in relation to recruitment, to meet the increasing demand for specialised

skills (Mortensen and Vilella-Vila, 2012), and to integrate the increasing digital tasks with remaining human tasks (Hines, 2011; Hines and Carbone, 2013).

Technology is also impacting work by facilitating flexibility that gives rise to remote working practices (Hines, 2011; Hines and Carbone, 2013; Wilson, 2013) and workforce mobility (Humphry, 2014; Khallash and Kruse, 2012; Mortensen and Vilella-Vila, 2012). This flexibility allows employers to access labour on demand more freely, no longer bound by previous work schedules. It also enables employees to organise work around other commitments (Hines, 2011). However, while technology has made it possible to work "anytime and anyplace" (Galinsky and Matos, 2011, p. 267) a number of authors do acknowledge the potential issue in maintaining work/life balance in the light of flexible work arrangements (Galinsky and Matos, 2011; Hines and Carbone, 2013). In spite of such concerns the reality of more flexibility in the workplace remains, propelled by technological innovation.

Finally, new technologies have also created the opportunity for, and rise in, collaborations across countries and networks (Bergman and Karlsson, 2011; Galinsky and Matos, 2011; Hannon, 2011). Organisations can now create virtual teams and collaborations across both internal and international boundaries (Galinsky and Matos, 2011; Hines, 2011), allowing them to harvest the knowledge and expertise of specialised individuals irrespective of their physical location. For specific regions, particularly those struggling to attract and retain human capital, it appears technology may offer challenges to the way work is conducted but also opportunities to draw on a previously untapped workforce.

Globalisation and Economy

The two final areas of focus when considering the work of the future relate to globalisation and a changing economy. These two issues, as well as the changes involving technology, are to some extent interconnected and as such the developments in one of these domains have contributed to the developments in another. For example, Wilson (2013) pointed out that technological advances have enabled the process of globalisation. In turn, globalisation has led to a one world economy where both people and products move around internationally (Coates, 2010). This has seen competition intensify (Mortensen and Vilella-Vila, 2012) and has changed how and where work is carried out. Moreover, outsourcing has become more common not only for low skilled manufacturing jobs but

also increasingly for more skilled service and administrative jobs (Wilson, 2013). The increase in overseas outsourcing of unskilled and low skilled roles, due to lower labour costs, has very likely contributed to the recent shift to a service or knowledge economy (Bergman and Karlsson, 2011; Galinsky and Matos, 2011; Mortensen and Vilella-Vila, 2012), particularly in many western countries. With these significant shifts taking place it is clear that both the nature of work and how businesses operate will have to adapt to accommodate and take advantage of the opportunities that globalisation and the new economy present.

3. THE QUEENSLAND CONTEXT

Queensland is an Australian state that has historically relied on the resources and agricultural sectors as the basis for its economy (Australian Bureau of Statistics, 2012; 2015b). However, according to the Queensland Treasury and Trade (2013) the multifactor productivity for the mining industry has declined by an estimated 9 per cent per year from 2001 to 2011. Additionally, Queensland employment in the mining sector has weakened since November 2013 and is predicted to continue declining through to 2019 (Australian Government, 2015b). Key statistics for Queensland are provided in Table 1, along with a comparison of these statistics to Australia as a whole, to demonstrate some of the differences in this region.

Of note, the survival rate of Queensland businesses is below the national average by 2.3 percentage points. Based on current discussions about the future of work, it is clear that a number of changes are occurring with the potential to significantly impact business in Queensland. However, much of the research has been conducted globally or nationally to identify the causes of these changes and more remains to be done in evaluating the key concerns for businesses in specific regional contexts. In a region such as Queensland which is undergoing changes in the nature of its economy, it is important to reflect on the extent to which these global changes are being felt at the local level.

Therefore, to assess the extent to which the themes identified in the broader literature were reflective of Queensland experiences, this study examined the key issues from the perspective of businesses in Queensland. In particular, key questions that guided our research were:

- 1. What are the major issues impacting on current and future work in businesses in Queensland today?
- 2. What actions are taken to prepare for and manage these issues?

 Table 1. Case Region Key Statistics.

Queensland		Australia	
Unemployment rate (May 2015)	6.5%	6%	
Employment by	Health Care and Social	Health Care and Social	
industry (highest	Assistance 13%	Assistance 12%	
ranking 2015)	Retail Trade 11%	Retail Trade 11%	
	Construction 9%	Construction 9%	
Projected regional employment growth by Industry - five years to November 2019	Mining -11.7%	Mining -40.7%	
Largest industries (based on gross value	Construction 302 120 (or 11% of the total GVA)	Financial and insurance services 132 981(or 9% of	
added GVA in Million	Mining 26 570 (or 10%	the total GVA)	
\$AU – June 2014)	total of GVA)	Mining 131799 (or 9% of	
	Health care and social	the total GVA)	
	assistance 19 400 (or 7%	Construction 124984 (or	
	of the total GVA)	8% of the total GVA)	
	Manufacturing 19 032 (or 7% of the total GVA)	Manufacturing 101 050 (or 7% of the total GVA)	
Largest	Professionals (450.500	Professionals 2 566.800	
occupational groups	persons or 19% of Qld	(22% of Australian labour	
(2014)	labour force)	force)	
	Technicians and trades workers (364.600 or 16%) Clerical and	Technicians and trades workers (1 691.600 or 15%)	
	Administrative Workers	Clerical and	
	(337.400 or 15%)	Administrative Workers	
Business survival rate	59.4 %	(1 625.000 or 14%) 61.7 %	
(June 2010– June 2014)	59.4 %	01.7 %	
Median age at June 2014	36.02	36.46	

Sources: (Australian Bureau of Statistics, 2014a, 2014b, 2015a; Australian Government, 2015a; Queensland Government, 2014, 2015b)

Smidt et al.

4. RESEARCH METHOD

As the research questions were of an exploratory nature, a qualitative method was considered most appropriate to obtain the data required. Rather than seeking broad trends across a large data set, this study sought to better understand, from the perspective of participants, how they are experiencing changes in the nature of their business or industry, and the flow on effects they see for workforces in their region.

Focus Groups

Views and perceptions of the major issues facing businesses from a Queensland perspective were collected through focus groups. The focus group method consisted of "[...] a controlled group discussion [...]" (Smithson, 2000, p.104). These discussions were guided by the broad research questions and allowed for themes to emerge. Using focus groups as a data collection method allows for the gathering of opinions, experiences and feelings on a specific topic (Krueger and Casey, 2015; Smithson, 2000). By using focus groups it was possible to collect data from a range of senior experts within a relatively short timeframe as several were present in each session.

Participant Sample

In identifying potential participants, purposeful sampling was used as it increases data credibility through the selection of relevant study subjects (Patton, 1999). Participants were therefore selected who had a role that provides them with sufficient exposure to a business or industry in Queensland. This selection promoted an understanding of the current issues and potential future challenges in the area of employment in this region. To ensure a breadth of knowledge, four groups were targeted: HR Managers across a wide range of industries in Queensland, management consultants with exposure to Queensland businesses, leaders of industry associations in Queensland and non-executive directors of companies based in Queensland. The networks of the researchers and the industry partner were drawn upon to identify the breadth of participants required. To ensure all participants were able to provide significant input, a decision was made to have no more than 8 individuals per focus group, and the groups were separated according to their role to ensure that the different perspectives were obtained.

The four focus groups included a total of 22 participants. Table 2 provides further background details about the participants while maintaining confidentiality in accordance with the ethical requirements of this study.

Table 2. Participant Background Information.

Background	Focus Group Number					
Information	1	2	3	4		
	Consultants	HR	Industry	Board		
		Managers	Groups	Directors		
Organisational type						
Government			2			
SOE**		1	1	2		
Private	7	4		1		
Non-profit		1	2	1		
Role type						
HR/People	1	6				
Managers						
Consultants	4					
CEO/Director	2					
Representatives			5			
Board member				4		
Gender						
Male	5	3	4	2		
Female	2	3	1	2		

** State owned enterprises. Source: the Authors

Data Collection

Focus groups were conducted in November 2014 and February 2015 in Brisbane, Queensland, Australia. The duration of the focus groups ranged between one and a half to two hours. For quality and consistency, a minimum of two researchers attended each session with one facilitating and moderating the group and the other(s) taking notes and observing.

All four focus groups were structured in the same way according to the main research questions, and around the key themes from the literature, whilst also allowing for new themes to occur. The focus groups were audio recorded and later transcribed verbatim and imported into QSR Nvivo® for analysis.

Data Analysis

Analysis of the data was performed using thematic analysis which is a flexible method that can be used "[...] for identifying, analysing and reporting (themes) within data." (Braun and Clarke, 2006, p.79). As part of the thematic analysis, both a theory-driven and a data-driven approach were applied simultaneously when inspecting the data.

In the theory-driven analysis a search for themes similar to those identified in the literature review was undertaken (also known as deductive coding (Corbin and Strauss, 1990)). During this analysis, any reference to one of the four themes i.e. Demographics, Technology, Globalisation, or Economy was coded against the relevant theme(s). In addition, the data-driven analysis, (also referred to as an inductive method (Braun and Clarke, 2006; Fereday and Muir-Cochrane, 2008)), was employed to detect any additional topics falling outside the predefined theory-driven themes. Any additional topics were coded against broad theme headings and subsequently reanalysed and divided into new themes and/or subthemes as required. Coding was undertaken by one researcher to ensure consistency, and checked by the other researchers to confirm findings and enhance dependability of the analysis.

The analysis of the focus groups demonstrated that Queensland businesses are feeling the impact of the same issues that emerged from the literature, along with some additional challenges that do not arise as often in broader discussions. The next section provides findings addressing the two research questions.

5. CURRENT FORCES SHAPING EMPLOYMENT

Overall the focus group results supported the themes identified in the literature as being the main drivers of change impacting on Queensland businesses at this point in time. In addition, two further themes were identified. This section outlines these themes and addresses the first research question.

Technology

Technology emerged as the most prevalent issue raised across all four focus groups. Specifically these issues revolved around automation, flexibility and social media, and the challenges and opportunities these present. In relation to automation the participants explained how technological improvements have enabled the automation of jobs and consequently altered how some organisations deliver services or develop products. One participant told of the transition from in-person transactions to online dealings with customers, "...it is more about getting to that online space so that people do business with us online, instead of face-to-face. And that has a massive implication. Massive". The increase in digital business was mentioned as having greatly affected organisations and this trend was predicted to continue, "There's so much new technology that's starting to eat away at our markets; and I am becoming aware of new technology every day". Advances in technology and the adoption and integration of these were reported as having led to tasks becoming obsolete and jobs becoming automated, "...is our organisation preparing for 2025? Yes, it is, but not for people. It is all about automation".

Additionally, new technology was mentioned as aiding flexibility, especially in relation to where work is carried out resulting in organisations adjusting their work arrangements, "... there's more flexible work arrangements and that's filtering down to workplace cultures, where people are wanting to attract staff and staff who want to work somewhere where there is that workplace flexibility; where they can work from home, ... and technology enables all that sort of thing". The ability to work anytime and anywhere was recognised as something that needed to be managed including the type of roles and extent to which flexibility was viewed as offering significant benefits to organisations, "...technology has given us huge lifts in productivity, let's face it. The fact [is] that the client doesn't need to know whether I am answering their email on my iPhone...".

Finally, social media was discussed as another significant technology issue and participants told of the challenge and necessity to work with, use, and manage these channels, "[I talked to someone who said] 'Oh, we have got 15 people now who do monitoring [of social media].' It is only a medium-sized business. That is just scary. It is a whole new industry; it is not going to go away". In particular the requirement to continually

monitor social media in order to assess and if needed adjust business approaches was stressed.

Demographics

The impact of demographics was also raised by participants, "[...] the other aspect that's also going to affect us pretty dramatically is the change in demographics". In particular, the focus was on the ageing of the population and subsequently the ageing of the workforce, "Five years on, I would think that we are probably going to see a turnover of people in our industry. We know that a lot of the actual production workers in the workforce ... are going to retire in that time". Loss of critical skills as a result of mass retirement was seen a serious concern. This was highlighted as being especially critical for small and medium sized businesses as one participant suggested, "... [with] the population getting older, owners of small/medium businesses [are] not having the next generation wanting the business". Ageing was believed to cause changes in the type of work and tasks that individuals sought for both physical and emotional reasons. As a result, manual and production labour was seen to be most affected by ageing as opposed to less physical demanding professions, which allowed employees to work past normal retirement age.

Globalisation

Globalisation was emphasised as a trend that had also reshaped work and influenced organisations in Queensland. The rise of global markets and expansion of the reach of businesses beyond national boundaries was something that participants felt organisations had to be aware of and take advantage of, "I think it will boil down to that explanation of understanding that we play in a global market; and you can start and run a company/business of any size from anywhere in Queensland". The reality of being able to operate globally was mentioned as having resulted in increased competition, "I actually think brands are under fire, particularly we will see more brands being global" and polarisation, "I worry about the effect of globalisation and the effect of polarisation on the services industry". In light of the intensification of competition, organisations not only need to compete locally but internationally in order to stay in business. Furthermore, globalisation was seen to be an ongoing transformation and when operating globally, companies need to manage both products and people. In relation to people, one participant

suggested that organisations now have to manage and offer workforce mobility, "Globalisation for us: a big issue around moving of talent". In line with the movement of talent, organisations were also increasingly looking at offshoring and outsourcing options to remain competitive, "[...] the other thing that we are facing is off-shoring". In short, globalisation with its increased competition, polarisation, workforce mobility, and offshoring is a multifaceted evolution that is impacting Queensland businesses.

Economy

The participants also identified factors relating to the economy as affecting work and organisations. One observation concerned the movement toward big operators which increasingly forced out smaller businesses in the market, "... the majors are really squeezing out the small operators". This tendency was reported to be felt at various levels and for various types of organisations, "Even if you look around your own neighbourhood, you will see that those corner stores are going or they are gone...". Also identified was the shift in the economy from a production to a service based economy which had consequently seen a decrease in the production related industries, "We went from 104 staff to 24 but our growth is well into 30/40 per cent year on year; and capacity to actually maintain and service that growth is quite a challenge for us". For the businesses affected this meant searching for efficiencies and in most cases cutting the largest operating cost namely labour.

Education and Training

For participants, developments under the topic of education and training were also regarded as impacting on businesses and their approach to employment. Specific concerns were around the gradual disappearance of low skilled work and entry level positions within many organisations and the resultant consequences for new generations, "So if we send our low-level work off-shore, what does that mean for our graduates and their careers?". Participants felt that this created issues when hiring new employees with little or no experience and raised questions about how to develop them with limited roles allowing for growth, "So the big question is: How do we create an entry level? How do we help people bridge the gap from school and career?". The challenge involved in career development was further enhanced by the often project-based

nature of roles in many organisations, "And really, for the industry, it is quite easy to skill up a project but, actually, how do you create a career pathway in a cyclic, project-based, uncertain industry [...]". Furthermore, participants highlighted the need for identification of future skills needs in light of the changes in the economy and with new technological developments affecting the types of skills required, and thereby the training and experience needed to produce such skills, "Within the five/ten-year mark, there will be no place for unskilled labour in manufacturing, in my view; and that's going to be really interesting...".

A number of participants raised the issue of education not adapting quickly enough to accommodate to the changing needs of businesses and stressed the need for further industry-focused career development. Although it was acknowledged by participants that it would be unfeasible to satisfy all industry skills needs, some key skills were identified as being consistent and unlikely to change making them critical for educational institutions to integrate into their curricula, "*Those skills will have to be people skills; you will have good interpersonal communication skills; you are going to be able to relate to customers. Those things are never going to go away*".

6. CHANGING NATURE OF WORK

Pulling these themes together and based on other comments from participants, the changing nature of work itself was identified as a crucial aspect in the Queensland region. The way in which work demands fluctuate and have now become more uncertain and unpredictable was similarly a challenge for businesses operating in the Queensland context, "Flexing up and flexing down is probably the single biggest challenge we have...well that is, you go through peak periods where you need lots of hands to the wheel; and then you need to be able to flex down at the same time and basically let people go, when you don't need that demand there". These fluctuations as well as internal changes in some organisations had resulted in an increase in the use of contingent labour in order to meet the variation in workload and remain flexible, "It is a challenge but we are definitely moving more and more towards contract because we have seen change or shifting in skill sets in the organisation". Moreover, the move towards project- based work has brought with it another challenge in managing and retaining people across and between projects, "...as some projects come off, 'How do we keep those people in the industry?' We have got quite a bit of work that we are doing around

trying to help people transition from project to project and that is in the short-term, one/two-year cycle". In short, the changing availability of work and less predictable nature of demands have ultimately changed how organisations conduct business and how they manage employment.

7. CURRENT ACTIONS TO MEET THE CHANGING NATURE OF WORK

To address the second research question, we analysed the current actions being undertaken by Queensland businesses to better position themselves to meet the challenges presented. In covering the key concerns and issues impacting on businesses, the focus group participants also reflected on the extent to which organisations were preparing for such changes. Although participants generally believed that there was awareness of the issues raised, they also largely agreed that few organisations were equipped to handle these changes nor were they taking steps to increase their readiness, "Businesses are thinking short-term", "The thing that keeps me awake at night is just the short-term nature of the decision-making". Planning in many businesses was not seen as strategic, in part due to the range of uncertainties identified, "Strategic planning now - everyone is saying, No use doing a five-year business plan. Basically, it will change ten times in 12 months. That's okay. But that doesn't lead to long-term strategic change/initiatives".

Notably, planning regarding the type and number of future personnel needed was seen as lacking, "What we see in workforce planning is everyone wants to do it. Very few are doing it". In part, the absence of planning was explained by some participants as being driven by the lack of insight into future reality and potential future scenarios, "I think a big problem with this, a problem we face: there's really no-one out there providing a vision of what the environment might look like for business; what the world might look like; what the economy might look like; what society might look like in 2025, 2035".

Although participants agreed that the general level of preparedness of businesses in Queensland was inadequate and left much to be desired in terms of planning, a selection of current responses in addition to ideas about effective solutions were identified when analysing the data. The responses and solutions mentioned were divided into six overarching topics.

Smidt et al.

Monitoring

Participants made mention of monitoring activities taking place in some organisations as a response and means of staying on top of the current changes. Such monitoring involved scanning and examining data relating to sales, new technology, demographics and the economy nationally and internationally. One participant spoke of monitoring in his organisation, *"we most certainly are looking at those marketing indications, technology indications; watching everything very closely and starting to develop that … agility"*. The key reasons for carrying out monitoring were to improve decision making and proactively change business activities according to what the data was showing in terms of future shifts.

Engaging the Workforce

Participants also provided examples of actions that some businesses were taking to attract and retain the required human capital. Some organisations were re-evaluating and adapting their recruitment and selection practices to reflect changes in services and products; changes that had consequently affected the skills required of employees in order for the organisation to be successful in the future. As one participant stated, "Some business are clearly aware of the types of criteria that will make someone a good organisational member in the future and these criteria are likely to be very different to what companies are recruiting for now". Moreover, participants also talked of organisations that had increasingly started to offer flexibility as well as alternative remuneration options, "I think many businesses, including ours, are embracing more innovative equity sharing models; and that sort of genuine sense of sharing the wealth, rather than the feudal system that we all ran before and hope to survive, but has not".

Changing Business Models and Structures

Some organisations were restructuring and altering their business models to adapt to both external and internal changes, "*There are those* organisations [that] are acting; they are taking a longer term, strategic view; whether that be mergers, acquisitions, restructures, brand new products". Taking such action was considered especially pertinent as businesses developed new value propositions, which meant current structures no longer supported new business objectives. In particular, some businesses were realising that their "[...] structure was built for a

company that is ten years ago." Moreover, participants observed that as part of rethinking how they operate, businesses, especially smaller ones, were starting to merge to survive in a competitive environment. In fact, mergers were reported across sectors, "Interestingly, in the not-for-profit sector, which is where you wouldn't really expect mergers to be high on the agenda, they are interested in merging as well because there's no money changing hands".

Harnessing Technology

Technology was seen as an issue but also a potential solution to some of the employment challenges facing Queensland businesses. To prepare for and deal with the inevitable changes, organisations were turning to technology and "certainly investing more heavily in technology; there's no doubt about that". Specific technologies were highlighted such as robotics and other automations and as one participant (of a relatively small organisation) stated, "We just put in five 3D printers in our office this morning". Such investments were seen as holding the potential to increase effectiveness and were even argued to be essential for survival by some participants, "You know, you do adopt technology or do things differently to be there in 2025".

Developing the Workforce

Participants also expressed a desire for governments to specifically address skills development through policy setting, to proactively ensure that future industry skills needs were being met and shortages avoided. Such policies would include adjustments to the educational system and were thought to enable the development of the right skills at the right time, the right place and in the right numbers. As one participant explained, "... *it is a policy setting thing, making sure - government is trying to make sure that we have the right kind of ... people through the education system and the right numbers*". However, at an industry and organisational level there was also mention of a need to develop and train employees to enable them to flourish in a constantly changing world. Some examples of training and development included cultural awareness, mobility, and offering career pathways in project-based environments.

8. CONCLUSION AND PRACTICAL IMPLICATIONS

In summary, it is clear that businesses in Queensland are highly aware of the potential changes that are likely to impact on their business. They know that changing technology, demographics, increasing globalisation and a volatile economy are all likely to result in major potential impacts. However, it is also clear that many businesses are unsure about how to address these issues in order to best cope with the coming changes. Development of strategies will be imperative in order for Queensland businesses to improve their survival rates to at least match the national average. While there is a large amount of uncertainly about what to do, many constructive actions have already been taken. These include: higher level of monitoring; better engagement and development of the workforce; changing business models and structures; and harnessing technology.

One implication that is clear from this research is that businesses will need to acknowledge the changes they will be faced with and subsequently adopt longer term strategies. A focus on the short-term will most likely lead to more 'business as usual' which is unlikely to result in long-term survival.

Another implication is the need for greater government and industry policy development and leadership. Many businesses struggle to invest in the information gathering required as their emphasis is usually internally focussed on their organisation and not beyond. Small businesses in particular are unable to afford the resources to gather and synthesise the information required to know what to do to meet the coming challenges. Many of the businesses however, will be impacted in the same or similar ways. Higher level bodies (such as industry groups and government) need to act now to analyse the relevant information and share this quickly and directly with business.

A final implication is the need to acknowledge the Queensland context in relation to shifts in employment. In particular, the shift away from industries such as traditional mining towards more service and health based industries needs to underpin future planning and policy development. Such an acknowledgement is crucial for the future success of Queensland business.

In conclusion, Queensland businesses are acutely aware of the coming changes. However, there is a clear need to better inform and educate businesses about how to address these changes. Governments and industry bodies need to take a lead role in informing and developing policy that will assist businesses in Queensland to continue to thrive.

Businesses know what aspects are changing most rapidly, and are ready to adapt but would benefit from direction and concrete assistance in relation to how best to do so. Only then can businesses successfully address the forces shaping work in a changing regional economy.

REFERENCES

- AHRI (2011). *people@work/2020*. Online version accessed, <u>http://resource.ahri.com.au/archive/5a1e3a5aede16d438c38862ca</u> <u>c1a78db</u>.
- Arntz, M., Gregory, T. and Lehmer, F. (2014). Can Regional Employment Disparities Explain the Allocation of Human Capital Across Space? *Regional Studies*, 48(10), pp. 1719-1738.
- Australian Bureau of Statistics (2012). *4102.0 Australian Social Trends, Dec 2012.* Online version accessed 13 July 2015, <u>http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Ma</u> in+Features10Dec+2012.
- Australian Bureau of Statistics (2014a). 3101.0 Australian Demographic Statistics, Jun 2014. Online version accessed 20 July 2015, http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.
- <u>OJun%202014?OpenDocument</u>. Australian Bureau of Statistics (2014b). *5220.0 - Australian National Accounts: State Accounts 2013-14*. Online version accessed 15 June 2015,

http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5220. 02013-14?OpenDocument.

- Australian Bureau of Statistics (2015a). 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2010 to Jun 2014. Online version accessed 15 June 2015, <u>http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8165.</u> 0Jun%202010%20to%20Jun%202014?OpenDocument.
- Australian Bureau of Statistics (2015b). 8415.0 Mining Operations, Australia, 2013-14. Online version accessed 13 July 2015, http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/8415.0 Main%20Features82013-14?opendocument&tabname=Summary &prodno=8415.0&issue=2013-14&num=&view=.
- Australian Government (2013). Industry outlook Professional, Scientific and Technical Services. Online version accessed 2 September 2014,

<u>http://joboutlook.gov.au/industryspecific.aspx?search=industry&i</u>ndustry=M.

Australian Government (2014). *Employment Outlook to November 2018*. Online version accessed 15 June 2015, http://lmip.gov.au/default.aspx?LMIP/EmploymentProjections.

Australian Government (2015a). *Employment by Industry*. Online version accessed 15 June 2015, <u>http://lmip.gov.au/default.aspx?LMIP/DownloadableData/Labour</u>

ForceRegionLFR. Australian Government (2015b). *Employment Projections for the Five Years to November 2019*. Online version accessed 2 September 2015.

http://lmip.gov.au/default.aspx?LMIP/EmploymentProjections.

- Bergman, A. and Karlsson, J.C. (2011). Three Observations on Work in the Future. *Work, Employment & Society*, 25(3), pp. 561-568.
- Boston Consulting Group (2007). *The Future of HR in Europe: Key Challenges through 2015*. Online version accessed 2 September 2014, <u>https://www.bcg.com/documents/file15033.pdf</u>.
- Braun, V. and Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), pp. 77-101.
- Brown, P. and Lauder, H. (2013). Auctioning the Future of Work. *World Policy Journal*, 30(2), pp. 16.
- Coates, J.F. (2010). The Future of the Workforce. *Employment Relations Today*, 37(2), pp. 1-8.
- Committee for Economic Development Australia (2012). Australia adjusting: Productivity, innovation and the future of work. Online version accessed 2 September 2014, <u>https://www.ceda.com.au/media/248932/cedapositionpmeconforu</u> mjune2012.pdf.
- Committee for Economic Development Australia (2015). *Australia's future workforce?* Online version accessed 13 July 2015, <u>http://adminpanel.ceda.com.au/FOLDERS/Service/Files/Docume</u> <u>nts/26792~Futureworkforce_June2015.pdf</u>.
- Corbin, J. and Strauss, A. (1990). Grounded Theory Research: Procedures, Canons, and Evaluative Criteria. *Qualitative Sociology*, 13(1), pp. 3-21.
- Deloitte and AMP Capital. (2013). *It's (almost) All about Me Workplace* 2030: *Built for Us*. Online version accessed 2 September 2014, <u>http://www.deloitte.com/assets/Dcom-Australia/Local%20Assets</u> /Documents/Services/Consulting/Human%20Capital/Deloitte_re port_Workplace_of_the_future_Jul2013.pdf.

- Eversole, B.A.W., Venneberg, D.L. and Crowder, C.L. (2012). Creating a Flexible Organizational Culture to Attract and Retain Talented Workers Across Generations. *Advances in Developing Human Resources*, 14(4), pp. 607-625.
- Fereday, J. and Muir-Cochrane, E. (2008). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods*, 5(1), pp. 80-92.
- Fingleton, B., Garretsen, H. and Martin, R. (2012). Recessionary Shocks and Regional Employment: Evidence on the Resilience of U.K. Regions. *Journal of Regional Science*, 52(1), pp. 109-133.
- Galinsky, E. and Matos, K. (2011). The Future of Work-Life Fit. *Organizational dynamics*, 40(4), pp. 267-280.
- Gratton, L. (2010). The Future of Work. *Business Strategy Review*, 21(3), pp. 16-23.
- Hannon, L. (2011). The Future of Work. *Strategic HR Review*, 10(2), pp. 57.
- Hines, A. (2011). A Dozen Surprises about the Future of Work. *Employment relations today*, 38(1), pp. 1-15.
- Hines, A. and Carbone, C. (2013). The Future of Knowledge Work. *Employment relations today*, 40(1), pp. 1-17.
- Humphry, J. (2014). Visualising the Future of Work: Myth, Media and Mobilities. *Media, Culture & Society*, 36(3), pp. 351-366.
- Khallash, S. and Kruse, M. (2012). The Future of Work and Work-Life Balance 2025. *Futures*, 44(7), pp. 678-686.
- Krueger, R.A. and Casey, M.A. (2015). *Focus Groups: a Practical Guide for Applied Research* (5th Ed.), SAGE Publications, Thousand Oaks, California.
- Leicht, K. T. (2010). Nickels and Dimes Won't Fix This: The Future of Work and Pay in America. Work and Occupations, 37(2), pp. 225-233.
- McKinsey Global Institute (2012). *Help Wanted: The Future of Work in Advanced Economies*. Online version accessed 2 September 2014,

http://www.mckinsey.com/insights/employment_and_growth/fut ure_of_work_in_advanced_economies.

 Melchor, O.H. (2013). The Government Workforce of the Future: Innovation in Strategic Workforce Planning in OECD Countries. OECD Working Papers on Public Governance, Organisation for Economic Cooperation and Development (OECD) Publishing. Online version accessed 15 August 2014, <u>http://qut.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMw</u> Y2AwNtIz0EUrEywtU40MkpItU4wtE5NMjc0NUkySzc0sUy2 Mk43SUpIMUcbfkAp4NyEGptQ8UQY5N9cQZw9dWGkZn5K TE29kCTqNDdjkMDQUY-BNBC0IzysBbxxLkWBQSDE2ME0 1tkwySzazBJa5JpYWoKPrLMyNU1OSLZNTUgCQMiqF.

Mortensen, J. and Vilella-Vila, M. (2012). The Future of Employment Supply and Demand in Social Europe. *Futures*, 44(7), pp. 671-677.

- Noseleit, F. (2012). The Role of Entry and Market Selection for the Dynamics of Regional Diversity and Specialization. *Regional Studies*, 49(1), pp. 76-94.
- Patton, M.Q. (1999). Enhancing the Quality and Credibility of Qualitative Analysis. *Health services research*, 34(5), pp. 1189-1208.
- Phillipson, C. (2013). Commentary: The Future of Work and Retirement. *Human relations*, 66(1), pp. 143-153.
- PricewaterhouseCoopers (2011). *Managing Tomorrow's People Series: Millennial at Work - Reshaping the Workplace*. Online version accessed 2 September 2014, <u>http://www.pwc.com/gx/en/managing-tomorrows-people/future-</u> of-work/download.jhtml.
- PricewaterhouseCoopers (2012). Managing Tomorrow's People Series: Talent Mobility 2020 and Beyond. Online version accessed 2 September 2014, http://www.pwc.com/gx/en/managing-tomorrows-people/future-

<u>of-work/pdf/talent-mobility-2020.pdf</u>.

Queensland Government (2014). Employed Persons (a) by Occupation (b), Queensland, 2003–04 to 2013–14 (c)(d). Online version accessed 15 June 2015, <u>http://www.qgso.qld.gov.au/products/tables/employed-persons-occupation-qld/index.php</u>.

Queensland Government (2015a). Employment by Industry. Online version accessed 15 June 2015, <u>http://www.qgso.qld.gov.au/products/reports/employment-by-</u> industry/index.php.

- Queensland Government (2015b). *Labour Force May 2015*. Online version accessed 15 June 2015, <u>http://www.qgso.qld.gov.au/products/reports/labour-force/labour-force-201505.pdf</u>.
- Queensland Treasury and Trade (2013). Estimates of Queensland Mining Productivity Performance 1989-90 to 2011-12. Online version accessed 18 June 2015, <u>http://www.qgso.qld.gov.au/products/reports/estimates-qldmining-productivity-performance/estimates-qld-miningproductivity-performance.pdf</u>.
- Roodin, P. and Mendelson, M. (2013). Multiple Generations at Work: Current and Future Trends. *Journal of Intergenerational Relationships*, 11(3), pp. 213-222.
- Ruona, W.E.A. and Coates, T.K.L. (2012). Leveraging Pull Forces for the Future of HR. *Advances in Developing Human Resources*, 14(4), pp. 559-565.
- Smithson, J. (2000). Using and Analysing Focus Groups: Limitations and Possibilities. *International Journal of Social Research Methodology*, 3(2), pp. 103-119.
- Wilson, R. (2013). Skills Anticipation—The Future of Work and Education. *International Journal of Educational Research*, 61(0), pp. 101-110.