

## **HR INNOVATIONS AN OPPORTUNITY FOR GAINING COMPETITIVE ADVANTAGE: EVIDENCE FROM AUSTRALIA**

Amarakoon U (*u.amarakoon@business.uq.edu.au*)  
*UQ Business School, The University of Queensland, Brisbane, Australia*

Weerawardena J (*j.weerawardena@business.uq.edu.au*)  
*UQ Business School, The University of Queensland, Brisbane, Australia*

Martie-Louise Verreynne (*m.verreynne@business.uq.edu.au*)  
*UQ Business School, The University of Queensland, Brisbane, Australia*

### **ABSTRACT**

Although innovation has long been identified as a source of competitive advantage, how Human Resource (HR) innovation enables firms to deliver superior performance remains an area of ambiguity. In particular the types of HR innovations undertaken and HR innovations' suggested link with firm performance and competitive advantage have received limited attention in the literature. With a view to develop deeper understanding of the nature of HR innovation, a qualitative approach was adopted in this study. The data collected from senior HR professionals of nine large scale manufacturing and service firms in Australia suggests that HR innovations differ in its type, degree of change (incremental to radical), and nature of outcomes (proximal and distal). HR innovation was found to drive (direct impact) and facilitate (indirect impact) firm-level transformations, leading to competitive advantage. This paper provides valuable insights for managers pursuing HR innovation-related competitive advantage and contributes to theory and future research.

**Keywords:** *HR innovation, radical, incremental, competitive advantage*

### **INTRODUCTION**

Innovation has long been recognised as a source of competitive advantage (Damanpour & Aravind, 2006; Lengnick-Hall, 1992; Porter, 1985) and therefore has become an area of substantial interest for both practitioners and academics (Damanpour & Aravind, 2011; Lengnick-Hall, 1992). Porter's (1985) seminal value chain analysis suggests that a firm gains competitive advantage by conceiving new ways to conduct value-chain activities to deliver superior value to the customers, which is an act of innovation. Therefore; (a) innovation and competitive advantage are closely connected, and (b) innovation can occur in any value-creating activity of the firm (Schumpeter, 1934; Porter, 1985). The view that innovation can occur in any stage of the value chain has led to a typology of innovation consisting 'technical' and 'non-technical' innovation (Damanpour, 1991; Schumpeter, 1934), which has gained prominence in the literature. However, to the dismay of many researchers (e.g. Damanpour, 2014; Damanpour & Aravind, 2011; Hailey, Farndale & Truss, 2005), innovation literature has primarily focused on technical innovation (product/service and process), paying limited attention to non-technical (management and marketing) innovations (Birkinshaw & Mol, 2006; Damanpour & Aravind, 2011) such as HR innovation (Hailey et al., 2005; Hamel, 2006).

We define HR innovation as a new idea adapted into a firm's HR programs, systems and practices with an intention to directly or indirectly add value (at least) to the adopting firm (Wolfe, 1995; Wolfe, Wright, & Smart, 2006). The Strategic Human Resource Management

(SHRM) literature, where HR innovation has received most attention, primarily focuses on radical HR innovations in performance management and reward and compensation practices and their outcomes (e.g. Barney & Wright, 1998; Wolfe et al., 2006). The innovation literature in general suggests that many firms pursue incremental innovations, which over a period will have a substantial effect on performance outcomes (Davenport, 1993). However, the role of incremental HR innovations on firm performance and/or competitive advantage has received scant attention. In other words, whether both radical and incremental HR innovations can lead to competitive advantage in a similar fashion it happens in the context of technical innovation is yet to be tested empirically. In addition, innovations in multiple HR practices and how those innovations interact (internal fit of HR innovations) to create value to the adopting firm have been limited.

Against this backdrop this study attempts to explore if both radical and incremental HR innovations can support competitive advantage in a similar fashion it happens in other types of innovation. Considering the exploratory nature of the research question, we adopt a qualitative approach in this study. The qualitative approach also allowed detail understanding of how multiple HR innovations interact to create value to the adopting firm. In this process, we draw from the SHRM and innovation literature and in-depth interviews with senior HR professionals of Australian manufacturing and service firms. The remainder of this paper is structured as follows: First, we briefly highlight key theoretical perspectives related to innovation and competitive advantage. This section focuses on the suggested link between HRM and competitive advantage, in the SHRM literature in particular; Second, we present an overview of the method adopted in this study; Third, integrating empirical evidence from extant literature, in-depth interviews and some electronic documents, we provide a detailed discussion on the nature of innovation in HR context. We also explore the nature of relationship between HR innovation and competitive advantage. Finally, implications to theory and practice are discussed.

## **INNOVATION AND COMPETITIVE ADVANTAGE**

As mentioned earlier, innovations can manifest as product/service changes, process changes, new approaches to marketing, new forms of distribution, new approaches to management and administration, and new conceptions of scope (Damanpour, 1991; 2014; OCED, 2005:16; Schumpeter, 1934). The outcomes of these innovations may result in lowering buyers' costs (cost advantage) and/or by providing differentiated value (differentiation) in ways the buyers cannot match by purchasing from competitors (Schumpeter, 1934) and therefore results in competitive advantage. This is consistent with Porter's (1985) seminal value chain analysis, suggesting that a firm gains competitive advantage by conceiving new ways to conduct value-chain activities to deliver superior value to the customers. Therefore, innovation and competitive advantage are closely connected and innovation can occur in any value creating activity of the firm (Porter, 1985; Schumpeter, 1934).

Despite scholarly consensus that innovation should be broadly defined to capture both *technical* and *non-technical innovation* (Damanpour, 1991; 2014; Porter 1990) innovation literature primarily focuses on technical innovations (product/service or process) in manufacturing settings (Birkinshaw et al., 2008; Birkinshaw & Mol, 2006; Damanpour 2014; Damanpour & Aravind, 2011; Hamel, 2006). There is growing evidence that both types of innovation can lead to enhanced firm performance (Damanpour, 1991; 2014; Damanpour & Aravind, 2011; Hamel, 2006; Weerawardena et al. 2014). However, non-

technical innovation in general (Damanpour, 2014; Damanpour & Aravind, 2011; Hamel, 2006), and administrative and HR innovation specifically, have received limited attention (Hailey et al., 2005). In addition, the process and outcomes of non-technical innovations have long been identified to be substantially different from technical innovation (e.g. Kimberly & Evanisko, 1981), but the theories and models of innovation developed based on technical innovations are applied in all contexts, including non-technical innovation (Damanpour & Aravind, 2011). This reflects a substantial knowledge gap. Therefore, non-technical innovation, HR innovation in particular, warrants closer investigation.

Innovations can be differentiated in terms of the degree of novelty and the nature of knowledge with which it is associated (Damanpour & Aravind, 2011; OCED, 2005:18). Innovation that relies on currently available knowledge and areas of expertise, and that focuses on introducing minor improvements to existing conditions, is considered *incremental* (Damanpour & Aravind, 2011; Subramaniam & Youndt, 2005). In contrast, the *radical* innovation involves ground-breaking, discontinues knowledge and disruptive changes to the status quo (Damanpour & Aravind, 2011; Subramaniam & Youndt, 2005). Although radical and incremental innovations can be adopted in both technical and non-technical areas, apart from a few exceptions (e.g. Birkinshaw, Hamel, & Mol, 2008; Hamel, 2006), incremental non-technical innovations have received much less scholarly attention than its technical counterpart.

## **HR INNOVATION AND COMPETITIVE ADVANTAGE IN STRATEGIC HUMAN RESOURCE MANAGEMENT LITERATURE**

The SHRM literature is the primary arena in which the linkage between HRM and competitive advantage has been examined (e.g. Barney & Wright, 1998; Cooke & Saini, 2010; Hailey et al., 2005; Schuler & Jackson, 1987; Wolfe, 1995; Wolfe et al., 2006). HR innovation serves two primary purposes in a firm, namely; (a) driving firm-level change and innovation (Barney & Wright, 1998; Carrig, 1997) (e.g. the case of Continental airlines), and (b) supporting firm-level change and innovation (Chang, Gong & Shum, 2011; Liker & Morgan, 2006) (e.g. Toyota implementing process improvements). In both cases, HR innovation is reported to improve response speed to environmental change, and produce flexibility and productivity, thereby improving overall firm performance (Barney & Wright, 1998; Becker & Huselid, 2006; Carrig, 1997) and competitiveness. Therefore, HR innovation can serve as a vital source of competitive advantage. Furthermore, HR innovation is socially complex, causally ambiguous, and path dependent (Barney, 1991; Barney & Wright, 1998; Becker & Huselid, 1997; Huselid & Becker, 2011). Therefore, the advantages gained over HR innovation are not easily imitable, and thus a source of sustained competitive advantage (Becker & Huselid, 1997; Huselid & Becker, 2011; Reed & Deffilippi, 1990). Hence, HR innovation warrants closer scholarly attention despite the limited attention in extant literature.

Furthermore, as mentioned earlier, limited literature on HR innovation primarily focuses on radical HR innovations in single HR practice such as performance management and reward and compensation practices and their outcomes (e.g. Barney & Wright, 1998; Wolfe et al., 2006). However, the configurational view of HRM suggests that HR systems and bundles of HR practices with adequate internal and external fit will have stronger impacts on performance (Arthur, 1994) and competitive advantage (Delery & Doty, 1996). *Internal fit* refers to the fit between HR policies and practices as well as the fit among HR practices, while *external fit* refers to the fit between HR practices and a firm's competitive strategy (Huselid, 1995; Michie & Sheehan, 2005; Milliman, Von Glinow, & Nathan, 1991; Wright & Snell, 1991).

Based on configurational view, we suggest that HR innovations with adequate internal and external fit will have stronger impacts on the firm performance and competitive advantage. However, as mentioned above, the extant literature only focuses on external fit of innovations in a few HR practices (e.g. Barney & Wright, 1998; Wolfe, 1995; Wolfe et al., 2006). Therefore, understanding if innovation can be undertaken in multiple HR practices and if internal fit of HR innovations (*i.e.* how HR innovation work in cohesion with other HR innovations and existing HR practices) warrant closer attention.

## METHOD

Consistent with the rationale suggested by Graebner, Martin, and Roundy (2012), a qualitative approach was deemed appropriate for this study.

## SAMPLE

Our initial discussions with HR experts and professionals suggested that firms with a significant HR functionality presence were the most appropriate to study the phenomenon of interest. Therefore, a sampling frame consisting of medium to large firms (in terms of the number of full-time equivalent employees - FTEs) with a dedicated HR department and a senior HR position (*i.e.* HR manager, senior HR consultant/partner, HR strategist, director HR, or vice president HR) was selected. Firms located in a major Australian capital city were identified from mining, construction, financial and consulting services, and automobile industries using the State Government's list of companies.

Initially, secondary data was gathered from publicly available sources which included: the nature of business operations, markets serviced and the degree of competition faced, history, management team, number of employees, other demographic information, and HR awards and recognitions received in the recent past, details of which were confirmed during interviews. This information was used in the selection of firms for the study. The literature suggests that the firm age and size (number of FTEs) are likely to relate to the degree of HR practice presence (Arthur, 1994; Damanpour, 1991; Huselid, 1995; Guest & Conway, 2011). Therefore, instead of randomly selecting participants, firms representing a wide range of age (ranging from fewer than 10 years to more than 100 years) and size categories (five in the below 1000 FTE category and four in above 1000 FTE category) were selected (Eisenhardt, 1989; Lincoln & Guba, 1985). A summary of firm profiles is presented in Table 1. Each size category included one firm that had won/nominated for multiple HR awards in the recent past, indicating very high levels of HR functionality presence; Firm D (below 1000 category) - '*Australian HR Team of the Year*', '*Best Reward and Recognition Strategy*', '*Employer of Choice for Women*', '*Australian HR Champion CEO*', and Firm G (above 1000 category) - '*Employer of Choice*' and '*Best Diversity Strategy*'. This approach, where firms representing different age and size categories were included, increases the generalizability and external validity of theory (Eisenhardt, 1989; Shenton, 2004).

## DATA COLLECTION

Although a review of the innovation and SHRM literature enabled an *a priori* identification of activities driving HR innovation, we did not assume any theoretical relationships (Eisenhardt, 1989). Potential participants received a mail invitation to participate in an interview followed by a confirming telephone call. The interview process was guided by a

protocol consisting of open-ended questions followed by extensive probing aimed at capturing fine-grained perspectives on the focal research problem (Creswell, 2007). Interviews were exhaustive, ranging from 50 to 75 minutes, and conducted by two interviewers simultaneously to limit interviewer bias (Eisenhardt, 1989).

## **ANALYSIS**

Interviews were recorded and transcribed. Each interview yielded just over 20 typed pages on an average. Interview transcripts were sent to respective informants for checking (Cho & Trent, 2006; Shenton, 2004). Adhering to the stepwise thematic analysis process suggested by Braun and Clarke (2008), interview transcripts were first read and re-read several times to become familiar with the data. Second, the key concepts emerging from interviews were identified and grouped into categories. Third, these categories were collated to develop broader themes. Fourth, the themes were reviewed to identify those relevant to HR innovation and competitive advantage. Figure 1 presents a graphical representation of how qualitative data were clustered into themes as mentioned above.

## **TYPES OF HR INNOVATIONS**

The qualitative evidence suggested that sampled firms undertake innovations in multiple types of HR practices. Their initiatives ranged from *incremental* to *radical* innovations in multiple HR practices including *recruitment and selection*, *training and development*, *performance management*, *compensation and reward*, *internal communication*, *organisational design*, and *health and safety*. A few of these innovations included: Firm A — *internal communication* - introducing confidential employee survey, exit interviews, and suggestions box, Firm B — *compensation and reward* - improving its reward and compensation practices to recognise employee talents, Firm C — *performance management and reward* - introducing performance-based rewards and training line managers on giving effective feedback, Firm E — *internal communication* - introducing ‘coffee-card-catch-up’, an opportunity for the team leader to improve informal communication and bonding with team members, Firm F — *job design* - empowering line managers with HR decision making related to operational employees, Firm H — *compensation and reward* - restructuring its compensation and reward practices after benchmarking with those in its industry, and Firm I — *training and development, internal communication* - designing new training and development practices to improve interaction and communication among employees.

In addition, it was evident that innovations in multiple HR practices work in synergy to add value to the adopting firm. For instance Firm D, made a strategic decision to offer its products to customers with a package of services aimed at developing a closer relationship and achieving greater customer involvement. This strategic initiative required substantial changes to the existing HR practices and the attitudes of HR professionals. In a systematic process, the Firm D identified the specific roles expected to be played by employees and the skills and capabilities required to perform such roles.


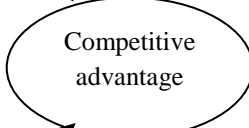
	<b>Empirical Observation</b>	<b>Theoretical Observation</b>	<b>Theoretical Construct</b>
<i>New HR changes/ Practices introduced</i>	<ul style="list-style-type: none"> <li>• ...we did a whole role redesign... we looked at the recruitment practices... we then looked at how we trained them... And then we looked at how we measure their performance - Firm D</li> <li>• ...having one enterprise agreement, previously we had six... A huge job. That was HR lead piece, but went across the organization...We had multiple payroll systems and we amalgamate them and we added them all together as well into one... – Firm G</li> <li>• Innovations in staff training, organizing remuneration and having a development and succession plan for staff, listening to them, respecting their feedback and communication... we have invested our money into. - Firm A</li> <li>• ...we were a fairly centralised organization and then we became decentralised as far as our HR practices go. - Firm I</li> </ul>	<p><b>Type</b> – Innovations in recruitment &amp; selection, training &amp; development, performance management, compensation and benefits, communication, and structure &amp; design</p> <p><b>Newness</b> – incremental to radical</p> <p><b>Value addition</b> – incremental to radical</p>	 <p>HR Innovation</p>
<i>Outcomes of new HR Initiatives</i>	<ul style="list-style-type: none"> <li>• The new reward system and talent identification system has kept people with us in a fairly tight market, we've been able to retain good performers - Firm B</li> <li>• ...we are ahead of competitors....we are becoming an employer of choice for those key employees we want to attract... - Firm C</li> <li>• We believe that the changes we are making will make it easier for us to attract and retain people [over competing projects]. - Firm A</li> <li>• A key driver is developing our leaders, another key driver is deliberating workforce capability –Firm G</li> </ul>	<p><b>Proximal outcomes</b> – improved capacity to attract, retain and engage employees compared to competitors</p>	 <p>Competitive advantage</p>
	<ul style="list-style-type: none"> <li>• ...it [HR innovation] made the job of leaders across the organization much more simple. They were wasting time doing administrative things...Now get on with the actual work which is serving our customers and bringing in income...- Firm G</li> <li>• That [restructuring] should deliver us some cost savings and better efficiencies in terms of being able to support field operations. - Firm B</li> <li>• It [new talent management program] will deliver sustainable returns through highly engaged and enabled talent – Firm G</li> <li>• ...we can deliver a much more personalised service...our business managers and our staff on the ground have quite close relationships with the client... - Firm A</li> <li>• We're getting some early feedback [from customers], and predominantly positive. It's a different experience - Firm D</li> <li>• We made a decision around the recruitment process and I actually managed to save the business about \$50,000 - Firm F</li> </ul>	<p><b>Distal outcomes</b></p> <ul style="list-style-type: none"> <li>• <b>Non-financial gains</b> - Productivity gains, improved quality of products and services compared to competitors</li> <li>• <b>Financial gains</b> – cost savings</li> </ul>	

Figure 1: Data structure analysis and emergent constructs – HR Innovation and Competitive Advantage

The HR professionals selected the right people, trained them, set targets, and also created the right work environment without which the model could have been an operational failure. As the general manager, HR of Firm D elaborated:

*...we (HR function) went and did a whole role redesign and evaluation of skills, competencies and capabilities that were required... We then looked at the recruitment practices... We then looked at how we trained them (newly recruited employees)... what do we need to do to actually train them in a new way.*

Firm D's innovations in recruitment and selection, and training and development practices were complemented by innovations in its performance management and compensation and reward practices. The evidence suggests that the consistency in innovations in multiple HR practices (internal fit) and consistency in HR innovations and firm's strategic objectives (external fit) have facilitated Firm D in provision of a differentiated product-service package to its customers.

In a similar example, when the current HR manager of Firm A joined the firm three years ago, the firm had extremely high turnover rates ranging from 25 percent to 38 percent in different employment categories. In an attempt to understand the reasons for high turnover, the HR team introduced a confidential employee survey, a suggestions box, and frequent formal and informal meetings with internal stakeholders, many of which also were innovations in firm's communication practices. In addition, based on the outcome of those innovations, new performance management practices were introduced. These included a systematic performance feedback mechanism and coaching supervisors and managers on giving effective feedback. As the HR Manager related:

*We did the confidential employee survey recently and one of the very strong feedbacks came through was the lack of communication and the people feeling lack of engagement in the business...So a lot of the innovations that we have had been around engagement for human resources.*

However, in instances where innovations in one HR practice was not consistent with or supported by other HR practices, the adopting firm could not achieve the desired outcomes of HR innovation. For example in Firm F, in an attempt to empower line managers with HR responsibilities, they were assigned with several HR administrative responsibilities (e.g., entering information into the HR system). However, the line managers were not provided adequate training or coaching to carry out the said HR administrative responsibilities. As a result, the line managers were found to lose a significant portion of their productive time doing HR activities. HR function of Firm F therefore had to bring back some of the delegated HR responsibilities. As the senior HR partner of Firm F stated:

*...we've alleviated some of the tasks (HR administrative tasks) from managers to free up some of their time.*

Effective implementation of HR innovation necessitated HR professionals to convince their top management and line managers on the potential benefits of the implementation. Therefore, HR professionals in sampled firms attempted to clearly establish how suggested HR innovation facilitates firm's goal achievement (e.g. Firms A, D, F, G, and I). As the HR manager of Firm A revealed:

*If you present something in a logical way and you can ensure return on investment or the benefits, it'll be approved and accepted in a really fast and efficient way...*

This highlights the need for linking HR innovation outcomes to firms' competitive strategy (external fit). Overall, our qualitative evidence concurs with the configurational view (Delery & Doty, 1996) suggesting that effective implementation of HR innovations requires appropriate levels of internal fit with other HR innovations and HR practices, and external fit with firm's competitive strategy.

## **INCREMENTAL AND RADICAL HR INNOVATIONS**

The study also probed into the degree of innovation (newness and intended value addition) of the new HR initiatives introduced by the sampled firms. The majority had frequently introduced incremental HR innovations, which were associated with lesser degrees of change, newness, intended value addition, and the number of employees affected. A few of these innovations included (as mentioned above): Firm A — introducing confidential employee survey, exit interviews, and suggestions box, Firm B - improving its reward and compensation practices to recognise employee talents, Firm E — introducing 'coffee-card-catch-up', an opportunity for the team leader to improve informal communication and bonding with team members, Firm F — empowering line managers with HR decision making related to operational employees; Firm H — restructuring its compensation and reward practices after benchmarking with those in its industry, and Firm I — designing new training and development practices to improve interaction and communication among employees. Although these innovations were incremental relative to the degree of change involved and number of employees affected in radical innovations, all were intended to add value to their adopting firms.

Although it was not as common as incremental HR innovations, our qualitative data provided evidence of radical HR innovations undertaken by sampled firms. For instance, in Firm G, which has multiple business units, HR policies for each business unit were initially developed in isolation and in line with six enterprise agreements. The new CEO of the firm wanted all its business units to work towards common goals. In this process, new project teams containing staff from the multiple business units were formed. As enterprise agreements and pay schemes of these business units were often different, the managing project teams consumed substantial time of project managers. HR professionals identified the need to innovate firm's HR architecture to improve its internal consistency by streamlining and amalgamating the firm's performance management and compensation and reward practices. As the manager, people strategy of Firm G elaborated:

*...prior to one enterprise agreement we had multiple payroll systems,... you could be a team leader; you've got a team of 10 different people and they're on six different employment agreements, which makes it very difficult... [there is] probably different personal sick leaves, different penalty rates; all of that is very complex...we added them all together into one; ...a huge job it was...it affected every employee in the company.*

Similarly, in an effort to create a high performance culture, Firm D introduced a 'competency framework'. In this process, the HR function first identified a set of competencies for each level of employment based on the values and goals of the firm (external fit), and introduced competency based performance management, training and development and reward and recognition practices subsequently (internal fit) to support implementation of the said



competency framework. In both examples above, HR innovations have resulted in organisation-wide changes affecting every employee of the firm, and therefore are radical HR innovations.

Overall, the evidence suggests that both radical and incremental innovations can add value to the adopting firm. In addition, it suggested that incremental innovation involves less risk and resource commitments compared to its radical counterpart. Therefore, more firms have greater receptiveness towards incremental HR innovations. Interestingly, by engaging in continuous and incremental innovation, HR professionals have made innovation a part of firm's culture, which has facilitated creating greater receptiveness for radical HR innovations (e.g. Firm D).

## HR INNOVATION AND COMPETITIVE ADVANTAGE

The SHRM literature suggests that effective HR systems and practices lead to *proximal*, attitudinal and behavioural outcomes, such as: reduced absenteeism/turnover (Huselid, 1995; Richard & Johnson, 2004), improved levels of job satisfaction, employee loyalty and commitment. In addition, such HR systems and practices lead to *distal* outcomes such as improved firm level creativity, innovation, quality of goods and services, and productivity (Arthur, 1994; Becker & Huselid, 1998; Huselid, 1995), through which HR influence organisational profitability and competitive position (Guest, 1997; Guest & Conway, 2011; Wright et al., 2005). Our qualitative evidence concurs with the above suggesting that HR innovation results in proximal gains through which it influences distal outcomes. For example, aforementioned HR innovations in Firm A have reduced absenteeism and turnover, and improved employee engagement (proximal advantages), through which it has gained cost advantages (distal). Other examples included: (a) reduced employee turnover and absenteeism (all except Firm E), (b) improved employee commitment and engagement (Firms D, F, G, H and I), (c) improved employee attraction and retention compared to competitors (Firm B), (d) improved productivity (Firms B, D, F, G and I), and (e) delivery of differentiated product/services (Firm D).

The evidence further indicated that both incremental and radical innovations can assist firms to outperform their competitors. For instance, as mentioned above, Firm B through an incremental HR innovation, improved its compensation and reward practices to recognise employee contribution, and as a result improved the firm's capacity to attract, engage and retain employees, compared to its competitors. Similarly, innovations in Firm B's organisational design have provided an opportunity to compete on the basis of cost. As the HR Manager of Firm B stated:

*By not having X number of people in a certain department, by reducing the staff by one person, we are able to be more competitive in the overall tender process.*

Similarly Firm G's amalgamation of multiple HR systems, which was a radical innovation, improved its productivity and provided cost advantages over competitors. As the manager, people strategy of Firm G related:

*...it (amalgamating HR practices) made the job of leaders across the organisation much simple. They were wasting time doing administrative things around different conditions ... (now they can) get on with the actual work which is serving our customers and bringing in income. I know our cost per unit is cheaper than Firm X (a close competitor).*

Our evidence further suggested that sample firms generally perceived investments in HR innovation as a way differentiating their product/ service delivery (Firm D) and /or a way of minimising operational costs. For instance, in Firm A investments in HR innovations far outweigh the resultant cost savings. As the HR manager of Firm A revealed:

*...given that we have 25 to 38 percent turnover at the moment, if we can reduce that turnover by five percent, we would save a few hundred thousand dollars a year which is significantly more than what we are actually spending on the innovation.*

In addition the evidence suggested that, if a firms' competitive advantage was driven or strongly supported by HR innovation, it was not easily imitable. As Firm D related:

*I'll be interested to see any of the other banks try and copy that (concept banking model), because it's very, very different the way we operate. ...ultimately it comes back to the way that we train our people, it's the way that we effectively employ them, recruit and then train them, assess them, and that's how we manage their performance and their target and so on.*

This concurs with the general consensus in the literature that the complex processes involved in building HR innovation enable firms to build human resources that will provide firm-specific advantages thereby erecting barrier to competitors (Barney & Wright, 1998). HR innovations therefore make it difficult for competitors to imitate the value adding HR practices enabling the focal firm to gain sustained competitive advantage (Barney & Wright, 1998; Becker & Huselid, 1998; Chang et al., 2011; Damanpour & Aravind, 2011; Wolfe et al., 2006). Overall the foregoing discussion suggests a positive relationship between HR innovation and competitive advantage.

## **IMPLICATIONS TO THEORY**

The findings of our study contribute to SHRM theory in several ways. First as mentioned above, extant empirical studies on HR innovation primarily focus on radical innovations and their outcomes (e.g. Barney & Wright, 1998; Wolfe, 1995; Wolfe et al., 2006), the role of incremental HR innovations on firm performance and/or competitive advantage has received scant attention. However, the innovation literature in general suggests that many firms pursue incremental innovations, which over a period will have a substantial effect on performance outcomes (Davenport, 1993). Similarly, the qualitative findings suggested that incremental HR innovations can support competitive advantage. Advancing the knowledge on HR innovation-competitive advantage link, the findings suggest that multiple incremental innovations together or continuous incremental innovations over a period of time have created substantial improvements in innovation outcomes. Given the positive relationship between the degrees of change associated with innovation and the resistance to change by affected employees (*i.e.* the higher the degree of change, the higher will be the degree of resistance to change and vice versa) (Wolfe, 1995), incremental innovations, over a period of time, resulted in substantial improvements at relatively lower levels of risk compared to its radical counterpart.

Secondly, extant literature has primarily focused on innovations in single HR practice and its outcomes (e.g. Barney & Wright, 1998; Wolfe, 1995; Wolfe et al., 2006). The findings of our study suggested that HR innovation can be undertaken in multiple HR practices of a firm. In addition, effective implementation of any HR innovation requires it be consistent with other HR practices (internal fit) and firm's strategic objectives (external fit).

Given the limited understanding of the antecedent factors of HR innovation and how those factors interact to design HR innovations to support firm's competitive advantage, a necessary next step would be a longitudinal study to establish the relationship between HR innovation and its antecedents (Guest, 2011).

### IMPLICATIONS TO PRACTICE

HR innovations were found to range in terms of their *type* (recruitment and selection, training and development, performance management, compensation and reward, internal communication, and organisational design) and *degree of change* (incremental or radical). HR innovations led to both *proximal outcomes* (improvements in attraction, commitment, engagement, and retention of employees) and *distal outcomes* (improvements in productivity, market performance, and financial gains). Interestingly, all HR innovations delivered positive outcomes. In addition, due to aforementioned complex social relationships associated with HR innovation, the advantage gained over it was found to be not easily imitated by competitors.

Furthermore, our qualitative findings suggested that many firms pursued incremental innovations, which over a period resulted in substantial effect on performance outcomes (Davenport, 1993). By engaging in continuous incremental innovations HR professionals were found to not only minimize risks, but also make innovation a part of firm's culture. The findings further suggested that benefits associated with HR innovation can far outweigh its costs. HR innovations often involve less investment compared to its technical counterparts. In the Australian context in particular, given that businesses who innovate are 78 percent more likely to gain productivity improvements compared to those who do not innovate (AISR, 2012), HR innovation can be a good stepping stone towards other types of innovation. Overall, the findings of this study suggest that at a time when firms strive for competitiveness, HR innovation can serve as a non-traditional, but vital source of competitive advantage.

### REFERENCES

- AISR (2012). "Australian Innovation System Report". *Department of Industry, Innovation, Science, Research, and Tertiary Education*. Available at <http://www.industry.gov.au/science/policy/AustralianInnovationSystemReport/AISR2012/index.html>
- Arthur, J.B. (1994). "Effects of human resource systems on manufacturing performance and turnover". *Academy of Management*, 37(3), 670–687.
- Barney, J. (1991). "Firm resources and sustained competitive advantage". *Journal of Management*, 17, 99–120.
- Barney, J., & Wright, P.M. (1998). "On becoming a strategic partner: The role of human resources in gaining competitive advantage". *Human Resource Management*, 37(1), 31–44.
- Becker, B.E., & Huselid, M.A. (1997). "High performance work systems and firm performance: A synthesis of research and managerial implications". *Research in Personnel and Human Resource Management*, 16, 53–101.
- Becker, B.E., & Huselid, M.A. (2006). "Strategic human resources management: Where do we go from here?". *Journal of Management*, 32(6), 898–925.

- Birkinshaw, J., & Mol, M. (2006). "How management innovation happens". *Sloan Management Review*, 47(4), 81–88.
- Birkinshaw, J., Hamel, G., & Mol, M. 2008. "Management innovation". *Academy of Management Review*, 33(4): 825–845.
- Braun, V., & Clarke, V. (2006). "Using thematic analysis in psychology". *Qualitative Research in Psychology*, 3(2), 77–101.
- Cooke, F.L., & Saini, D.S. (2010). "(How) Does the HR strategy support an innovation oriented business strategy? An investigation of institutional context and organizational practices in Indian firms". *Human Resource Management*, 49(3), 377–400.
- Carrig, K. (1997). "Reshaping human resources for the next century—Lessons from a high flying airline". *Human Resource Management*, 36, 277–289.
- Chang, S., Gong, Y., & Shum, C. (2011). "Promoting innovation in hospitality companies through human resource management practices". *International Journal of Hospitality Management*, 1–7.
- Cho, J., & Trent, A. (2006). "Validity in qualitative research". *Qualitative Research*, 6(3), 319–340.
- Corley, K.G. & Dennis A. G. (2004). Identity Ambiguity and Change in the Wake of a Corporate Spin-Off. *Administrative Science Quarterly*, 49(2), 173-208.
- Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. (2nd ed.). Sage: Thousand Oaks, CA.
- Damanpour, F. (1991). "Organizational Innovation: A meta-analysis of effect of Determinants and Moderators". *Academy of Management Journal*, 34(3), 555–590.
- Damanpour, F., & Aravind, D. (2011). "Managerial innovation: Conceptions, processes, and antecedents". *Management and Organization Review*, 8(2), 423–454.
- Davenport, T.H. (1993). "Need radical innovation and continuous improvement? Integrate process improvement and TQM". *Planning Review*, 21(3), 6–12.
- Delery, J.E., & Doty, D.H. (1996). "Modes of theorizing in strategic human resource management: tests of universalistic, contingency, and configurational performance predictions". *The Academy of Management Journal*, 39(4), 802-835.
- Eisenhardt, K.M. (1989). "Building theories from case study research". *The Academy of Management Review*, 14 (4), 532-550.
- Graebner, M.E., Martin, J.A., & Roundy, P.T. (2012). "Qualitative data: Cooking without a recipe". *Strategic Organization*, 10, 276–284.
- Guest, D. (1997). "Human resource management and performance: a review and research agenda". *International Journal of Human Resource Management*, 8(3), 263–276.
- Guest, D.E. (2011). "Human resource management and performance: Still searching for some answers". *Human Resource Management Journal*, 21(1), 3–13.
- Guest, D. & Conway, N. (2011). "The impact of HR practices, HR effectiveness and a 'strong HR system' on organisational outcomes: a stakeholder perspective". *The International Journal of Human Resource Management*, 22(08), 1686-1702.

- Hailey, V.H., Farndale, E., & Truss, C. (2005). “The HR department’s role in organizational performance”. *Human Resource Management Journal*, 15(3), 49–66.
- Hamel, G. (2006). “The why, what and how of management innovation”. *Harvard Business Review*, 84(2), 72–84.
- Huselid, M.A. (1995). “The impact of human resource management practices on productivity, turnover and corporate financial performance”. *Academy of Management*, 38(3), 635–672.
- Huselid, M.A., & Becker, B.E. (2011). “Bridging macro and micro domains: Workforce differentiation and strategic human resource management”. *Journal of Management*, 37(2), 421–427.
- Kimberly, J. R., & Evanisko, M. 1981. “Organisational innovation: The influence of individual, organisational and contextual factors on hospital adoption of technological and administrative innovations”. *Academy of Management Journal*, 24, 689–713.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- Michie, J. & Sheehan, M. (2005). “Business strategy, human resources, labour market flexibility, and competitive advantage”. *International Journal of Human Resource Management*, 16 (3), 445-464.
- Milliman, J.F., Von Glinow, M.A., & Nathan, M. (1991). “Strategic international human resources management (IHRM) in MNCs: Implications for congruence theory”. *Academy of Management Review*, 16, 318–339.
- Lengnick-Hall, C.A. (1992). “Innovation and competitive advantage: What we know and what we need to learn”. *Journal of Management*, 18, 399–429.
- OCED (2005). *The measurement of scientific and technological activities oslo manual: guidelines for collecting and interpreting innovation data* (3<sup>rd</sup> ed.). Science & Information Technology: Paris, France.
- Porter, M. E. (1985). *Competitive Advantage*. New York: Free Press.
- Porter, M. E. (1990). *Competitive Advantage of Nations*. New York: Free Press.
- Reed, R., & DeFillippi, R. (1990). “Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage”. *Academy of Management Review*, 15(1).
- Richard, O. & Johnson, N. (2004). “High Performance Work Practices and Human Resource Management Effectiveness: Substitutes or Complements?”. *Journal of Business Strategies*, 21, 133–148.
- Schumpeter, J.A. (1934). *The Theory of Economic Development*, Cambridge, MA: Harvard University Press.
- Schuler, R.S., & Jackson, S.E. (1987). “Linking competitive strategies with human resource practices”. *The Academy of Management Executive*, 1(3), 207–219.
- Subramaniam, M., & Youndt, M. A. (2005). “The influence of intellectual capital on the types of innovative capabilities”. *Academy of Management Journal*, 48, 450–463.
- Weerawardena, J., Mort, G. S., Salunke, S., Knight, G., & Liesch, P. W. (2014). “The role of the market sub-system and the socio-technical sub-system in innovation and firm performance: a dynamic capabilities approach”. *Journal of the Academy of Marketing Science*, Forthcoming

Wright, P. M., Gardner, T. M., Maynihan, L. M., & Allen, M. R. (2005). "The relationship between HR practices and firm performance: Examining the causal order". *Personnel Psychology*, 58, 409-446.

Wolfe, R.A. (1995). "Human resource management innovation: Determinants of their adoption and implementation". *Human Resource Management*, 34(2), 313–327.

Wolfe, R., Wright, P., & Smart, D. (2006). "Radical HRM innovation and competitive advantage: The Moneyball story". *Human Resource Management*, 45(1), 111–126.

#### Appendix 1: Profiles of firms that were sampled for in-depth interviews

<b>Firm</b>	<b>Key Informant</b>	<b>Number of employees</b>	<b>Sector /Nature of business</b>	<b>Year of inception (Australia)</b>	<b>Competitive position</b>
A	HR Manager	220	Mining - supply of explosives and associated services to the mining, quarrying and civil construction industries	Early 1990s	Market challenger Around 30 per cent market share
B	HR Manager	165	Mining - seismic acquisition and high-end seismic data processing services to the oil and gas industry	Mid 2000s	Niche player Around 40 per cent market share
C	HR Strategist	Clients have 100-1000 employees	HR Consultancy – carry out all HR activities for firms without a dedicated HR department	Late 2000s	Niche player
D	General Manager HR	1000	Financial Services – banking and personal insurance	1940	Market challenger Rapidly growing its market share in banking
E	Senior HR Partner	6000+	Construction - engineering, architectural, project management services to large scale projects	Mid 1990s	Market leader Provides one stop construction solutions
F	Senior HR Partner	3000+	Mining – explore and produce gas and oil	1954	One of the two market leaders in gas operations
G	Manager-People Strategy	15000+	Financial Services – banking insurance, and wealth management	1902	Market leader in insurance
H	Vice President HR	1100	Mining - explore and develop gas fields, produce and sell coal seam gas, and generate electricity	1997	Market challenger Rapidly growing market share
I	HR Manager	1500	Automobile – manufacture and sell trucks and cars	1967	Market leader in the truck manufacturing industry