Study of SME Innovation in two Queensland Industries

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ABSTRACT

This chapter describes research in innovation in smaller SME firms in Southern Queensland, Australia. The industries selected for this study were micro manufacturing in the Darling Downs Region and domestic building constructions in South East Queensland. Results of this research and its implications for innovation in the SME industry sector are discussed. While the firms studied, and the research methodology used, were quite different in each case, it was found that there were common factors that aided and inhibited innovation in each industry. These factors have implications for SME firms in other industries. Suggestions are made in the chapter with respect to the ongoing facilitation of innovation in such firms.

BACKGROUND

Australian businesses have increasingly investing in innovation in the last few years. According to the Australian Bureau of Statistics (2006), just over a third (34%) of Australian businesses undertook some type of innovation during the two years to December 2005. This was up four percentage points from the two years ended December 2003. By type of innovation, ‘implementing new or significantly improved organizational/managerial processes’ (25%) had the highest result. Approximately 22% of businesses reported ‘implementing new or significantly improved operational processes’ and 19% of businesses reported ‘introducing new or significantly improved goods or services’. Over 7% of innovating business reported introducing new-to-the-world goods or services.

From the 2005 figures, the proportion of innovating businesses increased with business size. This is most noticeable in the difference between innovating businesses that employ 5-19 persons (28.4%) and the results for businesses that employ 20-99 persons and 100 or more persons (46.6% and 51.5% respectively). This pattern is followed for each type of innovation with the exception of businesses that employ 20-99 persons which recorded the highest proportion of businesses that introduced new goods or services. More than 58% of innovating businesses reported cost as a barrier to innovation. Lack of skilled staff was reported as a barrier to undertaking innovation by 27% of innovating businesses. Profit-related drivers were reported as a key reason for all types of innovation with the exception of businesses that employ 20-99 persons which recorded the highest proportion of businesses that introduced new goods or services. More than 58% of innovating businesses reported cost as a barrier to innovation. Lack of skilled staff was reported as a barrier to undertaking innovation by 27% of innovating businesses. Profit-related drivers were reported as a key reason for all types of innovation with the exception of businesses that employ 20-99 persons which recorded the highest proportion of businesses that introduced new goods or services.

During 2006/07, over one-third (37%) of Australian businesses reported undertaking some form of innovation. Across the three statuses of innovation, larger businesses were
more likely to have undertaken innovative activity than smaller businesses. This scenario is consistent with that observed in the 2005 survey. The proportion of businesses that were innovation-active was greater for each successive employment size range, from 31% for businesses with 0-4 persons employed to more than double this proportion for businesses with 200 or more persons employed (66%). (In considering these results, populations for each of the employment size groups should be taken into account. For example, for businesses with 200 or more persons employed, an innovation-active rate of 66% represents approximately 2,000 businesses, whereas an innovation-active rate of 31% for businesses with 0-4 employees represents approximately 136,000 businesses.) Over 25% of businesses claimed that a lack of skilled staff significantly hampered their ability to innovate. More than three-quarters (76%) of innovative-active businesses claimed that the most common driver of innovation was profit-related (Australian Bureau of Statistics, 2008).

These statistics above provide a background to which this chapter examines the innovation process in Small and Medium Enterprises (SME) within two Queensland industries. All except two of the firms discussed in this chapter employed less than 20 employees, typically placing them in the smaller group of SME firms.

**INTRODUCTION**

Much of the academic research undertaken on innovation is based on large organizations. Some of the factors that influence the performance of this process include organizational culture, government policies and support mechanism, structural framework, investment communities, intellectual property protection, financial stability, research-industry relationships, the organization’s financial profile and stability, economic and corporate environment. However, there is increasing evidence to show that the most innovative and fast growth enterprises are from the Small-to-Medium Enterprise (SME) sector, such as small manufacturers who are operating with flexibility and innovation in niche markets within a very competitive global market place.

There is also increasingly improved structural support for these small enterprises from governments at all levels. However, such programs are often unable to flow down to the micro-manufacturers (less than yearly AUD 2 Million turnover per year), and access to relevant field officers for assistance are often very difficult especially within regional areas.

This poses an interesting scenario where it is often very difficult for these SMEs to access the available financial and non-financial assistance for their innovation activities. Because they are dependent on cash flow from existing operations as their innovation funding source (Featherstone, 2008), the incentives for SMEs to invest in innovation are diminished.

It is noted that business failure in SMEs is a comparatively rare phenomenon. Only around 2 per cent of SME businesses cease operations each year because the owners, while solvent, are unable to secure a sufficient return. And less than 0.5 per cent of businesses cease operations each year due to insolvency – down significantly from the rate applying in the early 1990s. Unfortunately, common misperceptions about the level of business failure and the chances of survival may lead some entrepreneurs to overestimate the risk of failure, thus reducing their willingness to innovate (Commonwealth of Australia, 2000).

The construction industry, which is one of the two industries discussed in this chapter, is not considered highly innovative with respect to other industries, including comparable sectors such as manufacturing and transport. For example, the OECD, in its 1998 *Science, Technology and Industry (STI) Outlook*, observed that the global construction industry has failed to achieve productivity improvement rates comparable to those of more mature manufacturing industries (such as textiles, steel and automobile manufacture). In Australia, the Australian Bureau of Statistics (ABS) has found that over the period 2001-2003 the construction industry, at 30.7 per cent, had one of the lowest proportions of innovating businesses (Australian Bureau of
Performance Improvement Tool Towards the Medicines Manufacturing Pharmaceutical Companies Under Sustainable Practices

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