ABSTRACT

The Rosebank Business Precinct is one of Auckland’s most highly developed Business Improvement Districts. This descriptive study, undertaken for Auckland City Council, examines the gaps between what Rosebank businesses actually want and what the workforce presently provides. It goes on to investigate the potential for cluster development in Rosebank. The findings show that the top training needs of Rosebank businesses were management, applied technology & trades, computing & information technology, and accounting. “Developing a Green Business” was the fifth most mentioned training need. Many owner/managers held unsupportive attitudes toward training and education. The paper makes recommendations in the fields of labour force development; agglomeration economics; and community entrepreneurship.

Key Words: Human resources, strategies, labour pool, training, education

INTRODUCTION

As New Zealand moves into a niche-based, knowledge and value-adding economy, the workforce of Auckland’s most highly development business improvement district, the Rosebank Business Precinct, needs to have the right training, skills and attitudes to meet the globalised business world and the earth’s changing environment head-on.

This study was financed by Auckland City Council. It focuses on Auckland’s Rosebank Business Precinct, a natural peninsula which since the 1950’s has been utilised for heavy industry. A large labour pool of skilled and unskilled workers lies in the two surrounding

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Territorial Authorities, western Auckland City and Waitakere City. Some of the surrounding communities, particularly Māori, Pacific peoples and some recent migrant groups, experience disparities in education and employment.

Our research questions were:
- Is there a skills match between the present-day workforce and actual business needs over the medium term?
- What can these data tell us about Rosebank’s trajectory as a skilled business cluster and about its future workforce requirements?

THEORETICAL BACKGROUND

The theoretical background of this research report is to promote the creation of new ventures (entrepreneurship), the growth of existing ventures (small business), and labour force improvement (education and training). Thus, the research has been guided by three theoretical streams: Labour force development and economic growth; Agglomeration economics and cluster development; and Community entrepreneurship and regional development.

Labour force development and economic growth

The better training that the employees receive the better their performance, the higher their degree of loyalty, the lower the labour turnover, and the greater the savings and profits for businesses. Apart from immigration, training is one of the best ways to confront the “hollowing out” of talent and its export to Australia and elsewhere. OECD (2003) research has shown that programmes targeting human capital are cost-effective because they build on local resources, provide “value-add” for tax dollars spent, and enrich the local skills base. A good example is Japan. Most Japanese manufacturing companies enjoy worldwide competitiveness precisely because their tertiary education and training systems were matched to the needs of employers (see Blakely 1991; Jones & Vedlitz 1988; Nothdurft 1991; O’Toole & Simmons 1989; Reich 1982; Thurow 1980; Wolanan et al. 1991; Wolman & Goldsmith 1992).

Skill shortages occur when a firm is unable to fill vacancies because of an insufficient number of job seekers with required skills. Research shows a frequent mismatch between what employers need and what workers actually can provide (Hill & Rock 1990; Nothdurft 1991). Skill shortages are a labour market problem that inhibits output. A better-skilled workforce affects the employer’s bottom line through immediate productivity gains. Training and education are essential tools for employers and policy makers. Training systems need to be in place so that the labour force can work effectively and efficiently (Ishaya 2006). The natural base for this is the tertiary institutions. Job training initiatives can only lead to benefits when they are consciously linked to both the specific needs of employers and of the workers themselves (Cook 1987; Ranney & Betancur 1992). Härtel et al. (2007) see labour force
development as one of the most strategic policies in the human resource management arsenal. Thussu (2000) and Ahlawat & Ahlawat (2006) highlight the need for increased focus on employment practices in the new business environment. Langbert (2005) and Sincoff & Owen (2004) point out the need for expanded curricula to ensure that relevant fields of training are covered.

Cressy’s (1996, 1999) finds evidence for the primacy of human capital in business longevity: Workers with higher levels of human capital earn higher wages. Skilled workers have more assets to invest in their own business formation. Both government and the private sector have a role to play in addressing skill shortages. Government must find ways to incentivise the education and training sector to tackle skills shortages.

**Agglomeration Economics**

*New growth theory* and its derivatives *agglomeration economics* and *community entrepreneurship* give us a broader basis for this investigation. New Growth Theory developed in the mid-1980’s through the work of Stanford economist Paul Romer (1986, 1990, 1994) and others, who demonstrated that there are actually *four* factors of production. The traditional three factors of production (natural resources, capital, and labour) were supplemented with a *fourth production factor* (knowledge & information). This had long been evident in leading economies but was not accounted for in classical economic models.

The direct intellectual descendent of this is Agglomeration Economics, a central field in regional economic development. Around the world today, cities, regions, and even space-bound industrial districts such as Rosebank Business Precinct, play an important role in national economic growth and prosperity. Large, densely populated areas are more productive and innovative, and they have greater ability to attract people, capital and activity. Rosebank must obey the new laws of global economics if it is to succeed. In the old economy, scarce resources went to areas where it was already scarce (e.g. bauxite to smelters).

In the new economy, it is just the reverse. Scarce resources gravitate to where they are already plentiful (e.g. entrepreneurs to Silicon Valley). *Kotkin’s Law* is that wealth accumulates where knowledge workers cluster (see Kotkin & DeVol (2001); Kotkin (2000, 2001)). Locations best able to command intangible assets will be the most successful. Skilled workers want good places to work and live, and so planners need to create liveable learning communities and workplaces to attract them. Even in the age of modern technology, the oldest fundamentals of place - sense of community, identity, history and faith - are critical determinants of success (Pennsylvania Economy League 2000).

A local, shared, and skilled labour pool is a desired economic externality, one that translates into gained human capital skills and knowledge spill-overs. Indeed, specialised talent is more important than abundant labour. The best known proponent of Agglomeration Economics is Harvard University’s Michael Porter (2003). According to Porter, tertiary institutions are
critical to agglomeration. There is a large body of literature that examines the spatial extent of knowledge spill-overs. Typical of these findings (Acs & Varga 2005) is that proximity amplifies the technology transfer and commercialisation between business and educational/research institutions.

Clusters allow individual firms to operate as though they had greater scale, while maintaining the flexibility required to compete effectively. Clusters allow especially small and medium companies to operate more productively because individually they may not have the resources or networks available to take into account the benefits of increasing external linkages and sharing knowledge.

The concept of knowledge clusters has become fairly standard in economic development literature in the past decade. A critical mass of competitiveness factors (information, skills, relationships, and infrastructure) provides the foundations for the growth of a value-adding knowledge cluster. How to define a cluster? Morosini (2004) operationalised a cluster as having inter alia (1) Common customers; (2) Common suppliers and service providers; (3) Common pool of human talent such as skilled professionals or specialised labour; (4) Common educational, training and coaching facilities and strategies; (5) Common university, research centre and technology institute specialisations.

Community-based entrepreneurship

The final theoretical stream that informs this study comes from Johannisson and Nilsson’s (1989) seminal paper on community-based entrepreneurship. In the past fifteen years, the literature on regional development through community entrepreneurship has grown hugely (IJIRD 2008). We define community-based entrepreneurship as “a community acting corporately as both entrepreneur and enterprise in pursuit of the common good” (Peredo & Chrisman 2006, p. 310). Local government in this sense could be seen as entrepreneurial. Community-based entrepreneurship involves a process through which new enterprises are created and operate in a community’s existing social structure (Peredo & Chrisman 2006).

The economic and social role of community-based entrepreneurship has been recognised by a growing number of disciplines, including sociology, management and urban studies (e.g., Bull & Winter 1991; Johannisson & Nilsson 1989; Light & Karageorgis 1994; Mezias & Kuperman 2001). Community-based entrepreneurship can be encouraged through human communication networking that influences local venturing processes and regional development. This literature shows that community-based entrepreneurship encourages regional development as people become part of a number of highly communicative knowledge communities.

In the end, this study may contribute theoretical insights on regional entrepreneurial development. We look at market conditions and human resource requirements for community-based entrepreneurship as well as at the interaction of entrepreneurship and regional development within the global context.
METHODOLOGY

The target population were the 500-600 businesses operating on Rosebank Road. These are the physical locations listed on: (1) the Roll of Rate Paying Businesses of Rosebank Business Association; (2) apnfinda intelligence data on businesses located on Rosebank Road; (3) Membership Directory of the Rosebank Business Association; and (4) Information collected by researchers in the field. When we combined and de-duplicated the data, we arrived at 529 businesses in the Rosebank population of firms. We conducted face-to-face interviews with 102 companies within that population. We used a 36-question questionnaire and employed random stratified cluster sampling. We divided the population into “Industry” and “Firm Size” groupings to establish desired representative proportions based on Statistics New Zealand (2006).

We selected a random sample from the members of each grouping. The grouping was treated as the sampling unit and analysis was done on a population of groupings. If after polling we did not reach the required level of representation in a particular grouping, then we went back to that grouping for more respondents. The sampling frame was owner-managers (and sometimes senior, non-shareholding managers) of firms within the Rosebank Business Precinct. This analysis is of firms, not individuals. About a quarter of respondents voluntarily agreed to be identified and contacted later for a second interview. We sent researcher teams back to 15 firms to interview and transcribed their remarks. In these second-round interviews, we asked: What are the three most significant things that limit your business? What are the three most significant things that would improve your business?

RESULTS

Forty-seven percent of the sample agreed to tell us their annual revenue or turnover. The mean value was $5.9m and the median value was $1.35m. Thirty percent of companies had revenues in excess of $3m. Nearly a quarter (23%) of firms had an annual turnover of $500,000 or less. The sampled companies comprised 33% manufacturing firms. Wholesaling and retailing taken together accounted for 36% of the responding firms. Seventy-eight percent had less than twenty employees. Rosebank owner/managers are predicting a steady rate of employment. The biggest decline in employment over the medium term is in sales & service (-34%). Unskilled workers were next (-24.9%) followed closely by clerical staff (-23.6%). The need for tradesmen (applied technologies and trades) is expected to increase sharply by +80.4%, followed by a gain for technicians at +23.1% and professionals 12.84%.

Skill shortages occur when firms are unable to fill vacancies because of an insufficient number of job seekers with required skills and so differ from recruitment difficulties and skills gaps. We look at anticipated vacancies, ease or difficulty of recruiting, the channel used for recruitment, and differences by job category. Of the respondent firms that had vacancies, 68.75% had vacancies for up to 3 months and 31.24% vacancies for up to 6 months. A lot of searches had been abandoned.
The highest level of anticipated vacancy was for tradesmen, with 25.1% of businesses reporting the need for more qualified tradesmen. This is followed by the need for sales and service staff at 21.8%. The need for technicians was 12.5%, followed by unskilled at 9.9%. Our research shows that the most frequently used recruitment method overall was word of mouth, but its “power score” was mid-rank. It was successful only for the lower job categories. Recruitment agencies were the most powerful by this measure. They were used for every type of employee but were most successful for tradesmen and machine operators, less so for management. Web/online was just behind recruitment agencies. Media channels had mid-rank score, were used frequently but were not at all successful for unskilled workers and machine operators. Work and Income New Zealand was excellent for unskilled workers and helpful for technicians but not at all useful for the other categories.

We explored the leading concerns of our sample firms. Employee retention was the most important of all issues, with 81% saying that this issue was either most important or important. Sixty-nine percent said that having the available skills was either most important or important. Thirty-nine percent of respondents were concerned about training costs. More than half of respondents (58%) said that staff recruitment was the main concern over the next 3 years. Fifty-two percent of respondents mentioned availability of training. Another significant concern for the Rosebank Business Precinct was the importance of infrastructure (57%).

When asked to describe the top education and training needs that they had over the next three years, respondents could choose more than one category and most respondents chose several categories, see Figure 1 below. The top needs of Rosebank businesses were: Management/strategy/operations/sales & marketing; Applied technology and trades; Computing & information technology; followed by Accounting, finance and law. A relatively new training need deserves special mention: “Developing a Green Business”. Twenty-two percent of respondents mentioned this as a need over the next 3 years.

*Figure 1: Where are your training needs over the next 3 years?*
When we asked whether the firm had training at all, forty-one percent said they already undertook training whilst 57% had nothing. Of those who already have training, we asked them to describe that training. This ranged from simple Occupational Health and Safety (OHS) training to more in-depth and expensive professional training. Responses included project management, time management, sales, IT training, electrical trade, food and hygiene, fire safety, first aid, warehousing, logistics, security, inventory management, competitor intelligence, trade certification, business coaching, and traffic management. When our respondents were asked why they had no training, 46% said it was because they did all of their own training on the job. The greatest source of training was shop floor training at 71%. Nearly half (46.9%) said that they could not afford any money for training.

Following Morosini (2004), we operationalised a cluster as having common customers, suppliers and service providers, labour pools, and common outsource partners. We first were interested to look at ownership patterns, as they can directly affect job growth and training needs. Reduced extent of New Zealand ownership and control of economic activity contributes to “hollowing out”, a term that describes the loss of core economic capability. This happens when a New Zealand company is bought by a foreign owner, moves offshore and takes with it both assets, and professional and capital market capacity.

Hollowing out through overseas ownership does not seem to be a problem in Rosebank. Fully eighty-one percent of the sample firms were majority (>50%) New Zealand-owned. We asked a matrix question designed to examine the localisation factors of Rosebank firms. We were interested in the proportion of suppliers, customers, outsourcers and competitors that lay within Rosebank itself, in the Auckland region, within New Zealand, and overseas. More than 34% of Rosebank firms had foreign suppliers, but the largest proportion of suppliers was outside of Rosebank but within Auckland (40.45%). Only 10.46% of suppliers were from within Rosebank Business Precinct. Just over half of Rosebank’s suppliers were from within the wider Auckland region (50.91%).

The bulk of their customers were in the Auckland region, with 20.22% in Rosebank and another 43.45% elsewhere in Auckland, bringing the regional total to 63.67%. Only one quarter (25.42%) of Rosebank’s customers were outside of Auckland but within New Zealand and 11% were overseas customers.

Rosebank firms do 63.57% of their outsourcing / subcontracting within the Auckland region. But 27.19% is actually outsourced to Rosebank firms. Rosebank firms have little contact with greater New Zealand outside Auckland for outsourced services and production. They were more likely to outsource from overseas (21.03%) rather than from within New Zealand itself (15.48%).

Eighteen percent of Rosebank’s competitors come from within Rosebank itself and a further 35.3% from the rest of Auckland, totalling 53.67% of competitors residing in the Auckland area. Rosebankers was marginally more likely to experience competition from an overseas source (23.08%) than from the rest of New Zealand (22.87%).
Combining customers, suppliers, outsourcers, and competitors into one chart called the Localisation Index, we see that Rosebank firms are highly oriented to the Greater Auckland region. A bulge occurs for Rosebank firms having overseas suppliers (purple), otherwise the firms are not overseas-oriented. A good share of firms chose other Rosebank and Greater Auckland firms for their outsourcing (red). Little of Rosebank business potential goes elsewhere in New Zealand.

What the Localisation Index (Figure 2, below) verifies is that Rosebank businesses are primarily servicing the regional market. If economic prosperity depends on export activity and other globalisation effects, then Rosebank is not internationally well-connected, except for inflows of raw materials and supplies.

![Figure 2 Localisation index](image)

We sent researcher teams back to interview 15 companies who had agreed to be identified and have a second-round in-depth interview. The purpose was to gain deeper insight into factors that might limit business and improve their business.

- There are many who expressed unsupportive attitudes toward training and education. Many Rosebank owner/managers are self-made school drop-out entrepreneurs and they may have a suspicion of education and training.
- There is increasing recognition that the hollowing out of trained staff is affecting everyone’s business.
- A deeper analysis of reasons for no training throws suspicion on cultural aspects such as motivation, education and expectations from a working life.
- There is an awareness of the need for a specialised labour force.
du Plessis & Frederick – Human resource strategy for training and education in the Rosebank Business Precinct of Auckland, New Zealand

- There is a lot of awareness of the globalisation of the economy and how New Zealand business should respond, particularly to China.
- There is a lot of grumbling about compliance costs (e.g. the labour cost and other expenses incurred in complying with national tax laws and other rules).

POLICY IMPLICATIONS

At the end of this endeavour, taking into account all the data collected and the analysis carried out, we allow ourselves to make some statement about the principal policy levers that Auckland City Council might employ to affect training and education situation in Rosebank.

Enhancing agglomeration

Our findings highlight the need for policy to address agglomeration economics and the attractiveness of Rosebank as a business location.

- More higher-value-chain businesses and suppliers need to locate in proximity of Rosebank to exploit potential “externalities”. This means clusters of businesses that have shared access to training and common points in the logistics chain.
- The already noteworthy number of international suppliers of imports should be increased and competitor firms within Rosebank should be stimulated.
- We need further research on how concretely Rosebank can cross the threshold from being a collection of co-located buildings into an active knowledge cluster or clusters.
- One leading agglomeration lesson from around the world is EXPORT. Most companies in Rosebank are not involved in export and so export stimulation is warranted.
- Nearby academic or research centres are not communicating with Rosebank. They need to be informed of Council’s strategic considerations as it relates to training and education as to a knowledge-based, innovation-centred Rosebank.
- It may be appropriate to consider property incentives for limited co-location of businesses with universities and polytechs by bringing together prime prospects and stakeholders and by providing land and infrastructure requirements.
- Take a “Top Three” approach to training: Computing/IT; Management & Accounting; and Applied Technologies. These are the top training needs on Rosebank Road today.
- Council can encourage networking between educational institutions and Rosebank businesses to better understand business needs, provide training, and revamp curricula to fit needs.
- Through role models and leadership, Council should undertake a campaign (contest?) to address prejudices, perceptions and awareness to make training attractive to New Zealanders
- Young entrepreneurs from the surrounding communities should be supported through clubs and micro-funding. This will prepare an enterprising generation to move into Rosebank in its time.
CONCLUSION

From the present analysis, it is apparent that many firms lack basic managerial, computing and technology skills, which in turn leads to lower survival rates. Training can help enterprise survival, improve employee performance, raise bottom lines, and be rewarding to people for having more skill. For large firms, general training such as certificates and degrees has been found to have a greater impact on productivity than specific training. Training is probably of greater relevance for younger companies than for established enterprises since they face more or less common set of managerial challenges.

Good practice also appears to indicate that training should be targeted to groups of entrepreneurs that share similar problems and challenges. At Rosebank, these training challenges are primarily: computing infrastructure; business management; human resource development; market research; technologies and trade; and compliance with government regulations.

Local intervention through the policies described above has potential advantages. Local planners understand the spatial variations in entrepreneurial activity as well as the scope for resource mobilisation and allocation. Local authorities have a role to play in matching programmes to varied local circumstances. Local educational institutions can adapt schemes to an area’s specific needs. They can operate near to trainees, allowing these to undertake training without spending excessive time away from the workplace.

There are occasions when the spark that ignites knowledge creation requires strategic guidance. Local government can also give signals to promote a higher bar of local innovation so that future businesses do not flock to sectors with low entry barriers in oversupplied markets. Such distress can be prevented, or mitigated, if local enterprise support agencies promote diversification and discourage overcrowding in the relevant markets.

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