The Impact of Financial Information on Organizing and Managing a Small Business

Rab Nawaz

A dissertation submitted to
Auckland University of Technology
in partial fulfilment of the requirements for the degree of
Master of Business (M Bus)

2012

School of Business

Primary Supervisor: Dr. Paul Wells
# Table of Contents

List of Tables .......................................................................................................................... i
Attestation of Authorship ........................................................................................................ ii
Acknowledgements ................................................................................................................ iii
Abstract ................................................................................................................................... iv

Chapter 1: Introduction ........................................................................................................ 1
  1.1 Background ..................................................................................................................... 2
  1.2 Purpose of the Study ....................................................................................................... 5
  1.3 Research Design ............................................................................................................. 7
  1.4 Proposed Contributions .................................................................................................. 8

Chapter 2: .............................................................................................................................. 10
  2.1 Literature Review on Business Organization and Management ......................... 10
    2.1.1 Introduction ............................................................................................................... 10
    2.1.2 Business Organization and Management .............................................................. 10
    2.1.3 Small Business Organization .................................................................................. 11
    2.1.4 Small Business Management .................................................................................. 13
    2.1.5 Financial Management ............................................................................................. 14
    2.1.6 The Role of Business Organization, and Management in the Success of a Small Business ............................................................................................................................ 17
    2.1.7 The Contribution of Financial Information in Business Organization and Management ................................................................................................................................. 19
    2.1.8 Conclusion ................................................................................................................ 19
    2.2 Literature Review on Small Business Supporting Processes ............................ 21
      2.2.1 Introduction ............................................................................................................. 21
      2.2.2 Accounting Information System ............................................................................. 21
      2.2.3 Owners-Accountants Relationship ......................................................................... 23
      2.2.4 Small Business Owners’ Financial Literacy ............................................................ 25
      2.2.5 Conclusion ................................................................................................................ 28

Chapter 3: Research Design ................................................................................................ 30
  3.1 Introduction .................................................................................................................. 30
  3.2 Methodology .................................................................................................................. 30
  3.3 Data Collection .............................................................................................................. 32
  3.4 Participants ..................................................................................................................... 35
Chapter 6: Conclusion .................................................................................................................. 89

6.1 Introduction .......................................................................................................................... 89

6.2 Answers to the Research Questions ................................................................................... 91
6.2.1 The Use of Financial Information in Decision Making ................................................. 91
6.2.2 Barriers to Financial Information ................................................................................. 92
6.2.3 Use of Accounting Information System ...................................................................... 92
6.2.4 Owners-Accountants Relationship ............................................................................. 93
6.2.5 Owners Financial Literacy ............................................................................................ 94

6.3 Contribution ....................................................................................................................... 95

6.4 Significance ......................................................................................................................... 96

6.5 Implications ........................................................................................................................ 98

6.6 Limitations and Areas of Further Research ...................................................................... 99

6.7 Conclusion ........................................................................................................................ 101

Appendix 1: .......................................................................................................................... 102
Appendix 2: .......................................................................................................................... 105
Appendix 3: .......................................................................................................................... 106
Appendix 4: .......................................................................................................................... 109
Appendix 5: .......................................................................................................................... 110
Appendix 6: .......................................................................................................................... 111

References .............................................................................................................................. 113
LIST OF TABLES

Table 1: Business Type, Ownership Structure, and Business Experience 46
Table 2: Annual Turnover 47
Table 3: Owners-Accountants Relationship 48
Table 4: Use of Accounting Information System 49
Table 5: Use of Financial Reports 50
Table 6: Sources of Recording Receipts and Payments 58
Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.
Acknowledgements

An entry into the world of conducting research is a challenge for a novice researcher. Completion of this challenge would not have been possible without the encouragement and support of my primary supervisor, and assistance of other people. Therefore I wish formally to acknowledge and thank:

Dr. Paul Wells: Being my primary supervisor, Paul tirelessly provided assistance from the submission of PG 1 to the final draft of this dissertation. His advice, critiques, reviews and valuable feedback enabled me to complete this research. I am deeply grateful for his enthusiastic encouragement and sense of humour during the research.

Dr. Karin Olesen: As my secondary supervisor, Dr. Olesen guided me in writing the PG 1 and gave me suggestions and feedback on different aspects of this project.

The participants: The completion of this dissertation would have not been possible had the twelve participants not been agreed to participate in this research. Many of these participants were very busy with work to very tight and demanding schedules and were unknown to me prior to the commencement of the project. The giving of their time and the depth and sincerity of their responses were more than I could have hoped for.

Ms Shoba Nayar: I would also like to thank Ms Nayar who proofread the draft of my dissertation. This enabled me to edit and format this dissertation before submission.

Farid and Azraq: I also appreciate the patience of my young sons Farid and Azraq who helped me to finish this project in time. They did not mind for not being giving them time and company on many occasions when they needed.
Abstract

The small business sector plays an important role in the economic development of a country. The contribution of financial management is considered a critical factor in the success and survival of small businesses. However, not much is known about the extent to which small business owners use financial management practices in making different business management decisions. What are those practices, and how New Zealand (NZ) small business owners use financial information in making management decisions, are questions investigated in this study.

This dissertation examines the existing literature to find the contribution of financial information in making organizational and managerial decisions. The literature review suggests that the use of financial information in decision making depends on the owners’ attitude and their level of financial literacy skills. A qualitative approach was adopted to investigate what financial information is used in making business decisions and the barriers the small business owners face in operating their businesses. A questionnaire and semi-structured interviews were used to collect primary data from 12 New Zealand small business owners. Using a questionnaire, this study sought to identify some basic perceptions of New Zealand small business owners regarding the benefits of using financial information in decision making. Semi-structured interviews were then conducted to obtain further explanation of the responses to the questionnaire.

The study found that the majority of participants were not aware of the critical business decisions which were significant for the success of their businesses. The low level of financial literacy skills in the participants resulted in the use of individual practices for measuring business performance and making business decisions. Internal and external
barriers were the two main types of barriers preventing participants from accessing financial information. Internal barriers included impediments emerging from the internal business environment such as participants’ lack of financial, managerial and IT skills. External barriers comprised barriers beyond the participants’ control. Lower level financial skills and financial constraints prevented participants in implementing a computerised accounting system. The study also found that external accountants were providing annual financial reports to their small business clients without explaining the messages conveyed in these reports.

These barriers and issues that confronted small business owners, and affected the business performance, can be overcome by the following proposed intervention strategies. The level of financial literacy skills can be improved by educating and providing training to small business owners about published financial management practices. External accountants need to evaluate the financial management needs of their clients and assist them in understanding the benefits of this information. The accountants also need to encourage the owners to implement a computerised accounting system for better financial management. Most importantly a strong communication link need be existed between the owners and small business supporting organizations to formulate strategies which assist the owners in resolving their financial and non-financial problems.
Chapter 1: Introduction

The role of small business is recognized for its contribution to the economic and social development of a country (Breen et al., 2003; Dyt & Halabi, 2007; Halabi et al., 2010). This contribution is judged from providing employment to skilled and unskilled workers, enhancing national Gross Domestic Products, and providing support to other small and large businesses (Heenetigala & Armstrong, 2009). Recognition of small business contribution motivates public and private organizations to support the small business sector by providing them with a diverse range of services (Lewis et al., 2007). This support comes in different forms such as training to improve managerial, financial, and information technology skills, and access to external finances (Massey, 2003). The nature, quality, quantity, and delivery mechanism of these services is different from one country to another (Evans & Volery, 2001). In New Zealand (NZ), many government agencies, non-government organizations, and private organizations provide different services to NZ small business owners to improve their skills and assist in resolving business problems.

There is no consensus on the definition of a small business because different countries have different criteria to define, support and regularise the needs of the small business sector. Some countries apply turnover or assets employed, but mostly the number of employees is used as criteria for assessing a small business (OECD, 2004). The NZ Ministry of Economic Development (2010) defines small business as “business which has any four basic characteristics: They are personally owned and managed, they do not have specialist management staff, owners make management decisions, and owners lack managerial expertise”. The Ministry also considers a firm with 0-5 full time employees as a small business. This definition is consistent with the definition by Street and Cameron (2007), who considered a small business as being independently owned, organized, and operated with
fewer resources such as limited capital, revenue, assets, and employees, and which is not
dominant in its field or industry. This current study applies the definition as described by the
NZ Ministry of Economic Development.

1.1 Background
Small businesses are organized, operated, managed and controlled by a *small business owner*. The term *small business owner* is being used throughout this study replacing other titles such as operator, manager, self-employed, sole-trader, and entrepreneur. For brevity, the alternative words ‘owner/owners’ have also been used to refer to small business owner/owners. Runyan et al. (2008), and Walker and Brown (2004) also used the term ‘small business owner’ in their study, which implies that a small business owner is an individual who operates a small business to enhance his or her personal goals and agendas. The owner’s skill, experience, education management and governance style, and industry related background encompass the strength or weakness of the type of business that he or she operates (Parry, 2010).

1.1.1 Business Organization and Management

1. Business organization and management are usually considered two separate but interrelated concepts that provide a roadmap of how to plan, setup, operate, control, and direct a business organization. The functions of business organization and management such as planning, staffing, directing, controlling are based on diversity of processes, and each function and process is managed by different approaches. In a small business, the role of business contribution and management is more important for larger types of business organizations (Jarvis et al., 2000). The owners’ awareness of organizational and managerial practices can provide them access to learn different skills and use these skills to grow their firms and overcome organizational and
managerial problems with confidence. Blackburn & Kovalainen (2010) maintain that research in small business management is still expanding and every new research contributes to the development of small business sector.

1.1.2 Role of Financial Information

Jarvis et al., (2000) found that financial management is critical to the success of any type and size of business. This highlights the importance of financial management in small businesses. Previous studies explored the benefits of financial reports in providing assistance to small business owners, understanding financial literacy in small businesses, measuring business performance, and small firms’ financial structure (Carton & Hofer, 2010; Chittenden et al., 1996; Halabi et al., 2010). This study, on the other hand, seeks to examine NZ small business owners’ management practices and focuses on how financial information is used in management decision making. Investigation from this standpoint is likely to enhance the importance of financial information in making business decisions. The study makes a contribution to understanding the behaviours of NZ small business owners in making business decisions. The empirical findings may also identify current and potential problems that may impede the application of financial information in decisions making. The findings will likely assist the owners in enhancing business growth, profitability, and overcoming potential failure of small businesses.

1.1.3 The Contribution of Accounting Information System

Prior research has examined the application of a computerised accounting system in small firms from different perspectives such as producing financial reports, measuring business performance and making accurate decisions (Breen et al., 2003). Other studies examined the role of accountants assisting owners on the adoption of computerised accounting system (Halabi et al., 2010), alignment of small firms accounting needs with information technology
(Ismail & King, 2007), and the role of computerised accounting in meeting management accounting needs (Marriot & Marriot, 2000). This study expands the scope of these studies by specifically investigating, within the NZ context, the owners’ level of computer literacy, financial literacy, and any financial problems that may prevent them from implementing a computerised accounting system.

1.1.4 The Owners-Accountants Relationship

The relationship between owners and accountants has been the topic of many previous studies (see for example, Breen et al., 2003; Halabit et al., 2010; Kirby & King, 1997; Marriot & Marriot, 2000). The globalization of businesses, industries and services created a great demand for professional accounting firms to provide advisory and compliance related services. While the Big-4 accounting firms generally focus on the provision of services to the large national and multinational, the second and third-tier accounting firms are delivering compliance and non-compliance related services to the owners of small businesses. While the accountants may be satisfied on the quality and delivery of services, an investigation is required to understand whether the owners are also satisfied with the services that their accountants are providing them. Parry, (2010) found that the owner’s criticism of the quality of accountants’ advisory services affects the relationship between owners and accountants (Parry, 2010). Kirby and King (1997) and Marriot and Marriot (2000), found that the accountants did not deliver the nature and quality of services that their small clients expected from them. This study investigates the nature of the conflict between NZ small business owners and their external accountants. The identification of owners-accountants relationship issues will provide an understanding to evaluate the significance of each problem and suggest appropriate solutions.
1.1.5 The Contribution of Owners’ Financial Literacy

The literature recognizes the contribution of owners’ financial skills and knowledge to the success, growth, and sustainability of small business firms. For instance, Deakins et al. (2002) examined the importance of owners’ attitude in learning financial management skills, and other processes that assist in strategy development and decision making. Walker and Brown (2004) found that instead of using appropriate financial management and business organization skills, owners mostly tend to follow achieving business goals by a management style that match with their personal life style. Similarly, Halabi et al. (2010) found that small business owners experienced difficulty in understanding the performance of their firms. This review indicates that the owners’ attitude plays an important role in the learning and use of financial management skills in making business decisions. This study investigates whether NZ small business owners understand how their businesses are performing and, if they lack the necessary financial skills, how do they evaluate their firm’s performance. An understanding of NZ owners’ attitudes on the role of financial information in decision making, and other factors that impede the development of financial literacy skills, will lead to finding relevant solutions.

1.2 Purpose of the Study

The aim of this research is to understand the problems that small business owners face in managing and organizing their firms. Organizing and managing a small business depends on the owners’ behaviour, skills, and prior experience (Walker & Brown, 2004). In making organizational and managerial decisions for growth and success, and for dealing with various business related problems, owners may not be using the knowledge and skills as suggested in the small business organization and management literature (Weinzimmer, 1997). Financial management makes a crucial contribution to each decision made for the organization and operation of a small business (McMahon, 2001). These viewpoints provide a motivation for
this study. The objectives of this study are to investigate: (1) how the NZ small business owners organize and manage their small firms, and what financial information they use in business management? (2) Do owners possess the knowledge, skills, and experience to apply different financial management practices for making business decisions?

Specifically, the research questions are framed to investigate different critical business decisions that the NZ owners use for the success of their businesses, and the description of financial information that they use for making these decisions?

**RQ-1** How does financial information facilitate decision making for small business owners?

If owners believe that financial information helps them in sorting their organizational and managerial issues, then how do they access this information? Are there any barriers that restrain them from obtaining financial information? What is the nature of these barriers, and how is this information identified? These questions lead to the formation of the next research question:

**RQ-2** What are the main barriers to accessing to financial information?

The use of AIS and owners-accountants relationship plays an important role in the management of a small business. AIS assists owners in making swift business decisions based on producing different financial reports. However questions may arise whether owners are inclined to using AIS or not, what benefits they expect from it, and what problems they face in operating and AIS. Similarly, the relationship between the owners and their accountants sometimes create problems. For instance, are owners satisfied with their accountants’ services, what are the issues and concerns of owners in dealing with their
accountants? These concerns, and the questions on AIS, raise the following research question:

RQ-3 How do AIS and accountants-owners’ relationship affect decision making in small business environment?

Another potential area this current study seeks to empirically examine relates to owners’ competence in understanding the financial aspects of their business operations. This area also seeks to explore the owners’ business knowledge, experience, and skills in making business decisions. It is also desired to see how owners obtain financial literacy. Hence, the following research question:

RQ-4 How does small business owners’ financial literacy assist them in decision making?

1.3 Research Design

In the context of small business research approaches, Nayak and Greenfield (1991) observed that most researchers applied quantitative research methods to investigate owners’ views on business planning, directing and controlling a small business. These studies mostly use survey based methods to achieve the objective of generalizability (Jarvis et al., 2000). Quantitative studies are criticised for being unable to discover the complexities of owners’ management strategies and their behaviour (Hill & Wright, 2001). These considerations indicate the deficiency of qualitative studies in the extant literature. Realizing the need for qualitative study, this dissertation also adopts a qualitative research approach.

Based on the research questions of this study, a qualitative study approach is considered most suitable for collecting and analysing data. The qualitative approach will assist the researcher
to examine the complexities of strategies and diversity of practices that NZ small business owners use in the management of their firms. Consequently, a greater expectation leading to reliable findings can be achieved.

1.4 Proposed Contributions

This study seeks to understand how NZ small business owners organize and manage their firms, and whether they use financial information in decisions making, the empirical findings are expected to explore specific characteristics of NZ small business owners. This finding is expected to make contribution to practice. From a practice perspective, the study seeks to make contribution by the findings of specific characteristics of small business owners, which will provide an insight on NZ owner’s perceptions regarding financial and business management. The study also seeks to make a contribution to practice by identifying areas of improvements for small business owners, accountants, and public and private organizations.

1.5 Structure of the Dissertation

The purpose, motivation, research method and prospective contributions of this study have been identified in this chapter. The remainder of this dissertation is organized as follows. Chapter 2 describes the literature review. This chapter provides an outline of existing literature on small business organization, management, and financial management practices; and also reviews prior studies on accounting information system, owners-accountants’ relationship, owners’ financial literacy. This chapter also shows the resulting research questions from the literature review. In Chapter 3, the research design employed in this study, research instruments used and data analysis method involved are described. In Chapter 4, the integrated findings drawn from the questionnaire and semi-structured interview are described. In Chapter 5, empirical results are discussed and intervention strategies are suggested. In
Chapter 6 the conclusion outlining the objective of study, its contribution, significance, implication, limitations, and areas of further research, are described.
Chapter 2:

2.1 Literature Review on Business Organization and Management

2.1.1 Introduction

The existing literature has made a substantial contribution to enhancing knowledge on the economical and social contribution of small business sector. However, there is still need of more empirical studies to understand how small business owners manage and control their small firms (Jarvis et al., 2000). This chapter reviews the main areas of literature associated with this concern. Different learning resources, such as electronic journal databases and internet search engines, were used to find relevant information in support of this section.

This chapter is structured as follows. The chapter has two main sections. Section 2.1 outlines different aspects of small business organization and management; and Section 2.2 describes small business supporting processes. A review on the role of financial information in the success of a small business follows.

2.1.2 Business Organization and Management

Small business organization and management has an important influence on the survival and success of a small business. According to Gowrishankar (2008, p. 95) “human behaviour in organizations is a function of both the “person” and the working environment”. This statement fits perfectly with the owner of small business organizations. Small business owners’ organizational skills and management style assist them in establishing the best governance system. This system is likely to assist them to manage their financial risks, gain competitive advantages and other economic gains (Chrisman et al., 2004; Gowrishankar, 2008). The formation of a business governance system thus depends on the owners’ level of
competencies in organization and management skills. This implies that the owners’
behaviour, their business organization, and management skills constitute the quality and style
of business governance in a small firm. These skills and styles are made of owners’ past
experiences, qualifications, family background, specific management style (Fuller-love,
2006), and their personal instincts such as risks perception and risk propensity (Petrakis,
2005). In the following sections, the owners’ behaviours and their skills are described in more
detail.

2.1.3 Small Business Organization

The knowledge of business organization skills assists owners to organize and manage
business resources in most economical manners (Gowrishankar, 2008). However, the
literature on small business organization is not expanding at the speed at which the issues in
small business sector are expanding (Amboise & Muldowney, 1988). Macpherson and Holt
(2007) claimed that the owners’ organizational skills are different from their management
styles. The former relates to owners’ recognition and innovation in business processes, while
the latter relates to systems and processes used to exploit opportunities as and when they
arise. This distinction divides organizational and managerial functions into two separate
categories. Each category has been supported in literature from theoretical and empirical
perspectives. For instance, Thornton et al. (2011) viewed small business owners’
organizational capabilities in terms of social capital, which refers to tangible and virtual
resources that assist owners in the attainment of goals that accrue to owners through social
structure. Restricting the concept of small business organization merely to owners’ internal
resources and their capabilities such as developing innovative ideas, gaining knowledge and
experience for operating the business, undermines the broad concept of business organization
(Portes, 1999). Greve and Salaff, (2003) used a broader concept of small business
organization by adding complementary resources such as owners social networks i.e. their
relationships, contacts, and trust with external parties. In a similar context, Zhang et al. (2006) considered owners’ organizational behaviour in terms of their abilities to utilize internal operational resources for gaining access to external resources.

Owners’ organizational behaviour develops from the social, economical, judicial and cultural environment in which the organization operates. These factors also affect the owners’ personal attitude and management style. For instance, an owner’s management style can be entirely different from managing a sole proprietorship compared to a limited company kind of business organization (Fuller-Love, 2006). The clear difference in sole-proprietorship and limited company type of business organizations from the accountability point of view, determines the management style of operating a business. Bankruptcy in a sole-proprietorship business allows law enforcing agencies to take legal action against the owners that may result in disposing of the owners’ personal properties. The knowledge of these and other business risks motivate the owners to use the best organizational skills in the management of business operations (Fuller-Lover, 2006). In a limited company, there is greater separation between the owners’ business assets and personal assets, which requires the owners to use more efforts for business success rather than increasing personal assets (Astebro & Bernhardt, 2003). The ownership structure thus plays an important role in the management of business operations in a small business.

Current entrepreneurial research frequently uses the term entrepreneurial orientation to describe entrepreneurs’ organizational abilities. Entrepreneurial orientation attributes reflects entrepreneurs’ personal abilities that concern their autonomy, risk taking propensity, competitive aggressiveness, proactive behaviour, innovativeness, and societal concerns (Gowrishankar, 2008). These abilities demonstrate the owners’ mindset in dealing with their
basic organizational decisions such as identification of competitors, type of industry, compliance related requirements, organizational goals, and financial criteria of their businesses.

2.1.4 Small Business Management

Entrepreneurial orientation may provide a framework that helps in establishing a well planned enterprise; but it may not be able to provide resources and the means to manage that business. In fact, providing sound leadership, ensuring consistency in business progress, managing risks, and resisting unexpected shocks, stems from the owners’ skills and experiences (Fuller-Love, 2006). This demonstrates the importance of management skills to the success and growth of a small business. From this perspective, the scope and effectiveness of owners’ entrepreneurial skills are not limited to a specific area in managing a small business. They are expected to be able to perform many managerial functions simultaneously. The small business owner is expected to be an expert in dealing with matters regarding sales, purchases, production, and administrative operations (Scwarze, 2008). As a consequence, they operate in a highly complex environment which requires them to be fully equipped with appropriate skills, knowledge and experience, be proactive in decision making and resolving issues (Fuller-Love, 2006).

Planning is considered an important function of business management. Operating a small business with strategic planning is a contributing factor in the successful management of a small business (Kraus et al, 2008). However, studies show that most owners are not aware of the contribution, meaning, uses, and benefits of planning in business (Woods & Joyce, 2003). Planning is considered an integral part of business management because it assists in identifying critical success factors and provides an operational platform for dealing with certain and uncertain, and unseen risks (Georgellis et al., 2000). Planning for higher profit,
lower expenditures, higher sales, customers’ satisfaction, and gaining competitive advantages, are considered to be some of the success factors in a small business environment (Fuller-Love, 2006; Gowrishankar, 2008; Woods & Joyce, 2003). Yet, the extant research provides no consensus on the exact identification and antecedents that constitute success factors for a small business environment (Benzing et al., 2009). From this perspective, planning can be considered an essential factor in the success of small businesses. Unexpected outcomes and business failure setbacks can be common symptoms if planning for future and strategic business processes is disregarded in the management of a small business.

Personal goals mostly influence the owners’ behaviour in the management of their small businesses (Jervis et al, 2000). Fuller-Love, (2006) and Gray, (2002) found that management in small firms is mostly affected by owners’ motivation for achieving personal goals, retaining full control over the business, maintaining independence, and completing their personal agenda. These views lead to the premise that the owners’ behaviour is the key factor in the superior management of a small business.

2.1.5 Financial Management

There is a significant literature on the role of financial management in a small business. Prior empirical studies have highlighted the importance and benefits of using financial management practices to assist in making business decisions (Goodeham et al., 2004; McMahon, 2001). Highlighting concerns over the low level of owners’ financial literacy skills, a number of prior studies highlighted the need to improve owners’ understanding and perceptions to the importance of financial management skills (Argile & Slof, 2003; Halabi et al., 2010; Marriot & Marriot, 2000). This potential area of research provides a platform to investigate how financial management assists owners in organizing and managing their business more efficiently and effectively.
Financial management makes a similar contribution to the success of a small business as the role of business organization and management. Financial management assists in managing a firm’s financial resources in the most economical manner (Deakins, 2002). It provides assistance in managing cash flow and working capital, measuring business performance, controlling fixed assets, and suitability of external finances (McMahon, 2001). The acquisitions of these benefits require knowledge, skills and experience. For example, small business financial needs are mostly met by owners’ own funds and borrowings through personal contacts. This provides owners the freedom not to worry about the preparation of financial reports to satisfy their external stakeholders (Romano et al., 2001; Walker & Brown, 2004). Halabi et al. (2010) found that not all small firms prepare financial statements despite its theoretical and practical implications for the health of a small business. Deakins et al. (2002) added that though some small business owners use financial information to make decisions, others adopt alternative methods instead of relying on financial information. This, however, does not rule out the necessity of maintaining an accounting system that at least assists owners in managing their goods and services tax (GST) and other taxation related obligations (Halabi et al., 2010).

Adverse outcomes may erode the acquisition of perceived benefits if decisions for such benefits are not supported by financial information (Collis & Jarvis, 2002). An important aspect of using financial information in making business decisions depends on the owners’ abilities to evaluate and assess the effects of such decisions on their current and future financial resources. For instance, obtaining external financial resources requires financial management skills that assist the owners in evaluating the financial needs and its effects on the firm’s growth and success (Chittenden et al., 1996). Romano et al. (2000) found that
inadequate financial management skills, lack of management experience, and negligence in using financial information in decision making hinders the owners' selection of the best mode of financing their business needs. This finding suggests that the owners’ understandings of basic financial management practices influence the success factors of a small firm (Jarvis et al., 2000), and lack of financial management skills can be a contributing element in the collapse of a small business (McMahon, 2001). This claim highlights the contribution of financial management skills in the success of a small business.

Comparing the role of financial management with the owners’ attitude, Collis and Jarvis (2002) claimed that the owners’ pursuit for lifestyle, maintaining autonomy, and stability instead of striving for the financial growth, can adversely affect the success of small firms. The contribution of the owners’ attitudes for using or not using financial management skills in making business decisions point to the prevalence of business management problems. Thus, while the perceived benefits of applying financial management practices assist in using business resources effectively and efficiently (McMahon, 2001), the non-users of financial information are unlikely to obtain the objectives of profitability, business growth, and customers’ satisfaction (Gooderham et al., 2004).

The structural, circumstantial, and economical situation of every small firm differs, and as a consequence, the owners require compatible financial structures that match their financial needs (Collis & Jarvis, 2002). This raises the question what financial information is required to make accurate decisions. Carney and Gedajlovic (2003) found a similar typical situation where small business owners were confronted with the issues of how to access financial information that would assist them to determine and manage the financial needs of their firms. Pineda et al. (1998) suggested that a better understanding of business organization and
management processes influences the usage of business and financial information in strategic and routine decision making. Change in owners’ attitude towards a greater understanding of financial information can help them to introduce more sophisticated and innovative business plans.

2.1.6 The Role of Business Organization, and Management in the Success of a Small Business

Owners use different business organization and management processes to plan financial, human and other business related resources before the establishment their businesses (Messersmith, 2011). These processes continue to develop after a business commences its normal operations. The life of a small business thus passes through different stages. Considering these stages as the life cycles of a small business, Berger and Udell (1998) explained that each life cycle generates diversity of financial and managerial needs, and each need requires specific criteria to manage it. Similarly, each cycle seeks different business organization and management strategies, and processes to achieve business objectives. Other life cycles of a small business includes its youth (growth), maturity (consistency), decline (circumstantial changes), and possible death (windup) (Phelps et al., 2007). However, Dodge et al. (1994) argued that no consensus has been achieved on the number of life cycles of a business, because the context and structure of each business is different. Where, a transition from one cycle to another is proposed, the level of business management practices and a firm’s formal information system need to be assessed from the outset to judge its capacity and suitability in the new cycle (Phelps et al., 2007). This implies that a good understanding of different life cycles, and planning and implementation of each cycle depends on owners’ management skills, willingness to adopt innovative business processes, and a desire for adopting a dynamic business management style. Owners, who lack management and organization skills, and motivation, may not be able to understand the life cycles of their
businesses. This may lead to various problems such as cash flow mismanagement, losing customers, difficulties in market planning, and difficulties in accessing to obtain external finances (Dodge et al., 1994).

Managing business growth is a challenging area in the management of a small business. According to Chaganti et al. (2002) growth in a small business depends on the owners’ management style, knowledge and skills. Hansen and Hamilton (2011) identified four factors that trigger growth in small business. These include opportunistic perceptions of the external environment, the owners’ ambition to grow, a business culture that strives to be innovative and flexible, and building private business networks. Other factors identified as contributing to the growth of a small business are: the competitive market environment (Chaganti et al., 2002), the firms’ business location (Gartner & Bhat, 2000), and the firms’ legal form, sector and ownership structures (Storey, 1994). A good understanding of business management practices enable owners to distinguish between growth and profitability. The business growth strategy may not necessarily seek to gain more profit, and profit increasing strategy may not be intended to increase turnover (Davidson et al., 2009). Generally, both growth in turnover and increase in profit are considered equally important for the success of a small business. However, the growth perspective raises a question, why some small businesses grow and some not? While little empirical evidence is available to answer this question (Leitch et al., 2010), the owners may achieve the desired objective of business growth if they possess higher level of business and financial management skills (Chaganti et al., 2002). On the other hand, failure to ignore the use of financial information in making business decisions is likely to lead to undesirable consequences that may include decline in profit, higher expenses, rise in cost of debts and cash flow problems (McMahon, 2001; Collis & Jarvis, 2002).
2.1.7 The Contribution of Financial Information in Business Organization and Management

Successfully organizing and managing a small business requires a good understanding of business planning, and strategy development. Planning strategies for current and future business operations depends on the availability of value adding financial and managerial information for making accurate business decisions (Collis & Jarvis, 2002). Depending on the level of management skills and experiences, the owners devise different methods of assimilating and storing business related information. A well planned and implemented information collection, storing, and retrieving system, enhances value adding business decisions (Salehi et al., 2010). Most business information stems from a firm’s operational, administrative and other business related processes. This information may consist of facts and figures of different business processes such as information about manufacturing, organizing, managing, governing, marketing, performance, and financing. Recognizing the contribution of financial information, Argiles and Slof (2003) found that undesirable results may override the achievement of anticipated benefits if its financial impacts were not understood when making business decisions.

2.1.8 Conclusion

The foregoing sections reviewed the contribution of business organization and management to the successful operation of a small business. In particular, the owners’ influence on their business operations was examined and linked to prior studies on small business organization and management. The literature review recognizes the multi-faceted role of small business owners in the organization and management of their business operations. This implies that the owners can achieve the objectives of planning, implementing and controlling business operations by continuous learning and updating their understandings with business organization and management skills. Alongside these investigations, an equal endeavour was
undertaken to explore the importance and application of financial information in organizational and managerial decisions making. The review of prior studies provides a clear indication of potential risks if financial information is not used in making business decisions. The background review also underpinned some important aspects of organizing and managing a small business, and using financial information in decision making.
2.2 Literature Review on Small Business Supporting Processes

2.2.1 Introduction

Section 2.1 reviewed the contribution of financial information in the organization and management of a small business. This section describes some specific processes that contribute to the success and survival of small business firms. These include accounting information system, owners-accountants relationship, and owners’ financial literacy.

2.2.2 Accounting Information System

Marriot and Marriot (2000) found that small business owners may make unreliable business decisions in situations where owners have no access to an appropriate Accounting Information System (AIS). Highlighting the importance on AIS in small firms, Dyt and Halabi (2007) identified, collecting, processing, reporting, and analysing business data to measure business performance, and seeking assistance in improving business processes, as key objectives of an AIS. The installation, implementation and maintenance of an appropriate accounting information system in small firms depend on the owners’ financial, organizational, and managerial skills and their appetite for embracing new innovative information technologies (McChlery et al., 2005; Wolf & Pett, 2006). Recognition of the contribution of an AIS enables owners to avail the benefits of streamlining different business processes such as monitoring inventories’ movement and turnover forecasts, handling materials and labour, analysing employees’ performance, and evaluating market conditions (Salehi et al., 2010). Mitchel et al., (2000) recognized financial management processes such as cash flow management, measuring business performance, costing and expenditure analysis, and controlling business processes, as other benefits of AIS.
Ramsey and McCole (2005) and Fillis et al. (2004) identified the expanding role of e-commerce, on-line buying and selling, and on-line transfer of funds, as key reasons behind the need for implementing an AIS. However, only compatible accounting information system that match with a firm’s information needs can support the management in recording, processing, and interpreting financial data for compliance, and performance measurement (Breen et al., 2004, Salehi et al., 2010). Information collected from these processes assists management in making value adding business decisions. On the question of when to implement an AIS in a firm, Petlier et al., (2009) found that the owners are required to identify their accounting information needs when a new business is formed, or when a firm start to experiences growth in business operations. Heenetigala & Armstrong, (2009) suggest that the owners must incorporate their current and future compliance related issues, such as GST and financial regulations in the proposed AIS to avoid the likelihood of processing problems.

Neglecting the need for installing and implementing an appropriate accounting system at a stage where a firm experiences growth in business operations, may affect the firms’ financial performance and the owners control on their business operations (Bitner & Powell, 1987). This finding lead to the question, what are the barriers to the implementation of an AIS in a small firm? Is it because of the owners’ attitude for not realizing the need of an accounting information system; or, do financial constraints prevents the owners from installing AIS; or both? Ismail and King (2007) found that certain barriers such as owners’ behaviour, hardware and software specifications issues, financial constraints, and alignment of accounting information needs may delay the adoption and implementation of innovative information technologies in small firms. Heneetegala and Armstrong (2009) suggested some of these barriers can be resolved by hiring the services of external accountants. Breen et al.
(2007) in their study on Australian small firms found that 98% of the respondents used external accountants’ advisory services for installing a computerised accounting system. The accountants may provide assistance in the evaluation of accounting information needs and its compatibility with firms’ business processes such as marketing, buying, manufacturing, customers relationship, and administrative issues. Dyt and Halabi, (2007) believed that accountants can potentially educate, and encourage the owners to install a computerized accounting system. Ismail and King (2007) also found that small business owners mostly seek accountants’ advisory services for installing, replacing, updating and aligning their AIS requirements because the accountants are more familiar with the owners’ nature of business and its information needs.

2.2.3 Owners-Accountants Relationship

Most small business owners hesitate to recruit professional staff for assisting in managing financial, managerial, information technology, and business development aspects of their businesses (Gooderham et al., 2004, & Jennings and Beaver, 1997). Some broad causes of this hesitation include: fear of losing control over business affairs, lack of resources to meet recurring expenses of these professionals, risk of losing business success factors and secrets, and fear of switching loyalties of employees to competitors (Davidson et al., 1989; Dyer & Ross, 2008). On the other hand, owners usually lack expertise to handling financial management of their business (Mitchell & Reid, 2000). Their inexperience, opportunistic behaviour, and lack of expertise in understanding financial management, affect their firms’ business performance (Perren & Grant, 2000). These obstacles lead them to engage external accountants for resolving operational, managerial, financial, and compliance related business issues (Dyer & Ross, 2008; Parry, 2010). Prudent small business owners often engage accountants to assist them in preparing their financial and management accounting reports to
improve their business operations, gain competitive advantage, and properly deal with potential business and management problems (Dyer & Ross, 2007; Jay & Schaper, 2003).

Small business owners generally consider accounting firms a last resort where they can obtain advisory services for resolving their wide range of managerial, financial, legal and administrative problems (Greenwood et al., 2002). Gooderham et al. (2004), in their study on small Norwegian firms, recognized the dominant role of accounting firms in providing a variety of advisory services to small business owners. Similarly, Xiao and Fu (2009), in their study on Chinese small firms, found that many small business owners acquire external advisory services to meet their financial, managerial and marketing deficiencies. Bennett and Robson (1999) explained that the first contact between owners and accountants is usually established when accountants are engaged for compliance related matters. This relationship continues to develop with the passage of time. The pre-existing relationship helps accountants to secure more business from the small business owners by providing them non-compliance related financial and managerial advisory services (Greenwood et al., 2002). However, an expectation gap between owners and their accountants emerges when accountants fail to deliver services as their small business clients expect (Kirby & King, 1997). In studies by Nandan (2010) and Marriot and Marriot (2000) owners were found to have concerns about their accountants who were not able to understand their management accounting needs, and business environment.

Raffo et al. (2000) found that owners, who pursue self-pleasing goals instead of business goals, resist formal business management training and improving their financial management skills. Owners with these attitudes struggle to overcome the problems of understanding local and international regulatory requirements, economic conditions, competitive environment,
and the status of their business performance (Gooderham et al., 2004). These obstacles effect the accountants’ position to support and deliver advisory services to their small business clients. Parry (2010) observed that if accountants are unable to understand small business clients’ psychological constraints, then all efforts in providing advisory services may lead to undesired results. Halabi et al., (2010); King & Kirby, (1997); and Marriot & Marriot, (2000) suggest that accountants need to develop an understanding with the expectations of their small business clients by analysing their life-styles and perceptions towards business success and failure, growth and stagnation, innovation and status-quo, before supplying any advisory service. Accountants can overcome these obstacles and avoid reputational loss by addressing the behavioural perceptions of their small clients before providing financial and administrative advisory services (Nandon, 2010). Leaving these implications unaddressed can result in unreliable and useless information to the clients, which will lead to distrust and termination of services contract (Kirby & King, 1997; Marriott & Marriot, 2000).

2.2.4 Small Business Owners’ Financial Literacy

Owners’ actions and their financial decisions directly influence the performance of their businesses (Jarvis et al., 2000). Their skills, experiences and knowledge encompass the level of their skills in financial management. Human learning is a process that builds on skills, knowledge, habits, attitudes, and the embedment of these attributes describes a human behaviour (Gib, 1997). Applying these attributes to an owner’s behaviour may lead to understanding the owners’ level of competencies in the management of financial matters. Financial literacy skills of a small business owner generally consists of an understanding and capability to deal with issues regarding managing firms’ financial resources by maintaining a healthy cash flow (Deakins et al., 2002), understanding and managing an effective credit policy (Chittenden et al., 1996), measuring businesses performance and interpreting financial statements and ratio analysis (Jennings & Beaver, 1997; Perera & Baker, 2007), and planning
profit for the growth and survival of business (Davidson et al., 2008). Literacy in financial matters assists owners to operate their business successfully and plays a decisive role in the economic development of a country (Hill, 2011). Planning external finances at start-up can probably be the first test of assessing the level of owners’ financial literacy (Nayak & Greenfield, 1991). Owners with limited understandings of financial information can either completely neglect the opportunity of acquiring external finances, or acquire finances on terms and conditions that best suit the lenders. The knowledge of financial information assists in comparing the impact of debts on business growth, profitability, cost of debts, and lead to manage cash flow to avoid bankruptcy (Jennings & Beaver, 1997). Gaining competence in financial management skills is a complex phenomenon that depends upon the owners’ academic background, business experience, training opportunity and its quality, ownership structure and nature of the business, and owners’ attitude (Fuller-Love, 2006). Owners’ lack of understanding of financial aspects of their business operations indicates an information gap that prevents them from making reliable business decisions (Schwarze, 2008). Servon et al. (2010) identified three attributes of such information gaps: language and cultural barriers, lack of awareness of available resources, and lack of financial education and/or management experience. These three attributes represent specific examples of potential impediments that most owners confront in the organization and management of their business operations.

Sound performance measurement systems assist owners to monitor, plan and control business processes with limited financial and human resources (Jennings & Beaver, 1997). However, this is only possible when owners understand the value of their financial targets, and adopt adequate measures for recording accounting information that assists them in evaluating and assessing business performance (Perera & Baker, 2007). Generally, small business owners perceive that the failure or collapse of their business is strictly their personal problem, and
that they are not accountable to any stakeholder such as creditors, customers, banks, and
government departments (Raffo et al., 2000). These misperceptions give them a
psychological edge and overconfidence of not feeling the need to measure their business
performance. Pointing to these misunderstandings, Richard and Auken (2006) found that
most small businesses collapse and are declared bankrupt because owners misunderstand the
consequences of not measuring their business performance. This phenomenon indicates that
the performance of business and its measurement is directly linked to the positive attitude of
small business owners (Deakin et al., 2002).

According to Wolff and Pett (2006), growth and profitability in a firm is highly correlated
with a firm’s internal processes, effectiveness and product improvement. This implies that
both internal processes and product innovation are highly dependent on the owners’
competencies and their adherence to the utilization of resource-constrained business
processes. Capturing, measuring and analysing financial and non-financial perspectives of a
small business require knowledge of relevant techniques, and interpretation skills (Fuller-
Love, 2006). Owners’ lack of financial literacy in understanding the importance of financial
management skills prevents them from preparing financial reports, and therefore they
consider volume of cash at bank as a measurement of the firm’s performance (Halabi et al.,
2010). The complexities of measuring business performance and the issue of associated costs
appear to be discouraging the owners from measuring and evaluating their business
performance. Marriot and Marriot (2000), and Gooderham et al. (2004) suggested that these
circumstances should not be used as an excuse to avoid understanding and learning the
importance of financial skills for measuring, controlling and operating enterprises. The
consequences of neglecting that these precautions likely lead to: failure to achieve growth in
sales and profit, higher operating expenses, losing market to competitors, and other unperceived threats to the survival of business.

2.2.5 Conclusion

This section reviewed the role of financial information, the owners-accountants’ relationship, and the level of owners’ financial literacy skills. The review of prior studies showed that unless financial information is made a core component of decision making process in small firms, decisions concerning the organization and management of a small firm will lead to undesired results. From the perspective of using accounting information technology, the literature review confirms that AIS contributes a supporting role in the efficiencies of business processes. The literature review, however, noted that the installation and implementation of AIS depends on owners’ financial literacy, financial resources, and a good understanding of the benefits of AIS. Prior studies on owners-accountants relationship confirms that some basic misunderstandings exist between the accountants and their accountants. Small business owners complain that their external accountants not provide them the services which they expect from them. The theoretical background also highlights the importance of owners’ expertise in financial management skills, and its contribution in the success of a small business.

This literature review provides an insight into the business organization and management of a small business. Small business management and organization are two separate and broad areas in research. The use of financial information in making organizational and managerial decisions is found to be the precursor for successfully operating a small business. The use of financial information in business decisions, however, depends on owners’ competence in understanding financial management practices. Owners’ financial literacy was examined from different perspectives to explore potential areas that impede the owners from using
financial information in making business decisions. The literature reviewed in this chapter provides the justification to empirically examine how NZ small business owners use financial information in making organizational and managerial decisions. This empirical investigation seeks to explore questions relating to the use of financial information in decision making, the use of the AIS, the owners-accountants relationship, and the influence of owners’ literacy in decision making.
Chapter 3: Research Design

3.1 Introduction

Chapter 2 provided an overview of literature relating to the contribution of business organization and management in the success and survival of small business firms. It also described the contribution of financial information in success and survival of small businesses. Chapter 2 also highlighted the importance of three significant supporting processes. The overview of theoretical background provides an understanding of the contribution of using financial information in making business management decisions but it does not specifically describe whether small business owners use this information or what kind of information they use in making financial decisions.

This chapter outlines the research design of the current study including: research methodology, data collection, participants, data collection instruments, data analysis procedures, reliability and validity. Ethical issues are explained, and finally a summary of all major research design processes is presented.

3.2 Methodology

Research design is an organised and structured procedure that guides the researcher on the collection and analyse of data (Bryman & Bell, 2007). The components of a research design depend on the type of research, its scope, and the extent of its objectives. A limited purpose or a micro research project might have a simple research design; whereas research with multiple objectives (a macro research) might have a more complex research design. A subjective criterion may therefore be not overruled in the designing of a research. The
researcher can reduce the impression of subjectivity by providing proper justification on the contents of research design.

This study adopts a qualitative research method which seeks to investigate without influencing the behaviours and business environment of NZ small business owners, issues that affect owners’ business performance from organizational, managerial, and financial management perspectives. The application of proposed qualitative approach would assist in developing an understanding about the perceptions, experiences and knowledge of NZ small business owners.

According to Bryman and Bell (2007), research method is a tool or an instrument used as a source of collecting data. This study applies a mixed-method approach for data collection. The primary data shall be collected with two instruments: a questionnaire and a semi-structured interview. The data analysis was performed using a qualitative study approach. The data collection using a questionnaire sought to provide a structure to facilitate comparison of questionnaire responses with interview responses. The following sections describe significant aspects of the research method and strategy used in this study.

The focus in qualitative studies is on respondents’ characteristics, their specific circumstances, and its relevance with the issues being investigated. These types of studies also assist in understanding the economic and political benefits that stem from organizational actions (Bryman & Bell, 2007), which helps in locating the context and objectivity of problems in specific ontological settings. From an epistemological stance, qualitative studies are more interested in gaining deeper understanding of human behaviour by putting forth the subject’s context and its theoretical implication on a given issue. The objectives of this study
are consistent with the attributes of a qualitative research approach. Investigating and identifying organizational and managerial skills of small business owners and using financial information to resolve business issues can be studied better by adopting a qualitative approach.

3.3 Data Collection

Collecting reliable, valid and biased-free data to arrive at independent findings can be considered the primary aims in planning the research design of any empirical study. A good comprehension of these notions is necessary for a novice researcher. Awareness of these factors was an essential element in deciding the data collection tools for this study. Different data collection methods were examined to explore the most appropriate method that matches with NZ small business owners’ social environment, and their potential co-operation or reaction for participation in this research study. This led to the use of two instruments for data collection: a questionnaire and semi-structured interview. Both instruments were proposed to find the answers to the four research questions.

3.3.1 Questionnaire

The objective of using a questionnaire for data collection was to provide participants a sense of confidence and trust that the data collection was an easy process, while also being used to cross-check questionnaire responses with responses from semi-structured interview. The questionnaire was constructed under four broad categories (Appendix-1). These categories included: Business Information, Owners-accountants’ Relationship, Accounting Information use, and Owners’ Financial Literacy/awareness. Each category comprised different close-ended questions. Altogether, there were 20 questions. Questions under Category-I consisted of basic business information. These questions were framed keeping in view the nature of research questions, and specific social and cultural circumstances that distinguish NZ small
business owners from owners in other countries. Questions in Category-II consisted of the nature of relationship between owners and their accountants. The basic objective of questions in this category was to get an understanding of the problems that the owners develop with their accountants. Category-III questions aimed to develop an understanding of the uses of AIS in NZ small business sector. In Category-IV, questions sought to understand the level of financial literacy of NZ small business owners in managing the financial aspects of their business. It was estimated that 15 minutes would be required to complete the questionnaire.

3.3.2 Semi-Structured Interview

Face to face interaction with participants on specific issues enhances the chances of obtaining a deeper understanding of the issues being investigated. Structured and semi-structured interviews are the two basic and commonly employed research methods in social science studies. Using semi-structured interviews instead of structured interviews, for this research, was to provide participants an environment where they felt at ease to share personal feelings to specific questions. The objective of capturing participants’ explanations, clarifications, and interpretation of specific events and patterns can only be achieved if participants are provided with enough options to express their views that match their individual practices and experiences (Bryman & Bell, 2007). The semi-structured interview was designed on the life history interview approach. This type of approach investigates issues concerning the lives of individuals in a specific social context (Bryman & Bell, 2007). Jones (1983) considered life history approach a reliable methodology for judging affirmative or negative aspects of the lives of individuals in an organizational socializing and career development context. The theoretical and conceptual structure in this research study also examines the same context. It seeks to empirically prove how small business owners pass through significant events in the management and organization of their enterprises.
Designing questions for the semi-structured interview, that portray a neutral, non-offending and friendly impression, was an essential part of the research design. Likewise, it was highly desired that participants’ responses to the questionnaire and semi-structured interview should not by any chance move out of context of the research questions. This required a comprehensive exercise on developing and including only those questions that help to avoid participants and researchers’ biases. An understanding of these concerns led to the structure of developing guiding questions for the semi-structured interview into three broad categories. Category-I comprised questions relating to an investigation of the relationship between NZ small business owners and their accountants. Questions in Category-II related to using AIS in NZ small business sector. Questions in Category-III sought the truth about the level of financial literacy of NZ small business owners. An in-depth study of the research methodologies used by Halabi et al. (2010), Dyt and Halabi (2007), and Marriot and Marriot (2000) on small business owners, helped to formulate guiding questions for the semi-structured interviews for this research project. Altogether 11 questions were used as a guide to initiate semi-structured interviews. A time of 20 to 30 minutes was allocated for the completion of the interview. These questions were supplemented by other questions depending on participants’ responses to guiding questions and peculiar circumstances of each participant. The questions used in semi-structured interviews are attached at Appendix-2.

Interviewing NZ small business owners to discover how they manage and organize their business from a financial perspective was a very sensitive issue. There was a higher risk of resistance from potential participants. The foremost concern was related to participants’ reaction to the questions that directly relate to their personal instincts and business management skills. To address this issue, participants were assured verbally and in written form that participation in the research was strictly confidential, and that the participants could
decline to respond to any question. Two other concerning issues related to the question of how to recruit participants for the study, and the required procedure for making a contact with potential participants. The first concern was resolved by informing participants on the multiple benefits that can be achieved by participating. The second concern was resolved by adopting a systematic approach that involved first contacting the participants by an email, then by a telephone call, and finally by an in-person visit.

3.4 Participants

Participants for this study were NZ small business owners. They were selected from different types of businesses across various industries in the Auckland City. A non-probability or a non-random sampling method was used for this study. The sample frame was comprised of the population of all NZ small business owners who were operating in Auckland City, and were performing any small business activity, irrespective of their age and gender.

3.4.1 Participant Numbers and Selection Criteria

Selecting an appropriate number of participants is a difficult issue for a researcher in qualitative studies. Some basic issues that needed to be addressed before deciding the number of participants include: time and cost, the kind of analysis and the chances of a non-response (Bryman & Bell, 2007). Deciding a small, medium or large sample size from a large population need be supported with proper justification to dispel the impression of using researcher’s bias in the study. Giving due considerations to these issues, a sample of 12 NZ small business owners from Auckland City was considered an appropriate size to support the investigation in this project. A justification for this sample size was derived from a study by Halabi et al. (2010) who recruited 10 Australian small business owners over a period of four months to investigate the impact of financial information in decision making. Saunders et al.
(2003) also suggested a small number of participants in qualitative research because it helps in exploring the research context through sound interaction and communication between the researcher and participant. These claims were also endorsed by Eisenhardt (1989) who suggested that 10 to 12 participants were sufficient for case study research.

The participants were selected from two websites: www.ubd.co.nz and www.finda.co.nz. Initially a list of 30 NZ small business owners operating in Auckland City from different industrial sectors was prepared. Potential participants were contacted via email and telephone calls. Following a slow and disappointing response, potential participants were subsequently contacted by personal visits. Information Sheet showing details of the project was provided to each participant (Appendix-3). The participants were requested to sign the Consent Form before completing the questionnaire and conducting semi-structured interviews. A copy of Consent Form is attached at Appendix-4. This research was approved by the AUT Ethics Committee (AUTEC) on 12th August 2011.

3.5 Data Analysis

This section details the process of analysing the data collected through the questionnaire and semi-structured interviews.

Two types of reasoning are used in most research to discover new knowledge. One is inductive, and the other is deductive. An understanding of deductive and inductive reasoning in research before starting the data analysis, and subsequently drawing conclusions, is a significant tool of research design. Both concepts provide the basis for analysing data more appropriately. According to Hyde (2000), an inductive reasoning is a theory building procedure which starts with observations regarding any specific phenomenon, and then investigates to find whether that phenomenon has been found and worth generalization.
Deductive reasoning relates to a theory i.e. a pre-established theory, or ‘generalization’, which is tested in other instances to see whether it applies in instances which are under investigations. From an epistemological orientation perspective, quantitative data analysis strategy is used for deductive approach, whereas, qualitative data analysis strategy is used for inductive approaches (Bryman & Bell (2007). These understandings helped in the process of data collection and data analysis for this research.

Data analysis is dependent on the method of data collection (Flick, 2006). This means that planning for data collection is the main area of consideration before adopting any procedure for data analysis. Data for this study was collected by a questionnaire and conducting a semi-structured interview mixed method approach. Generally, there is no hard and fast rule or method to analyse data in a mixed method type of research strategies (Flick, 2006). In other words, quantitative and qualitative strategies describe how to collect and analyse the data but never suggest a specific approach for collecting or analysing data because each strategy has separate epistemological and ontological orientation. With the understanding that interview responses inform understanding of the questionnaire responses, greater attention was placed on the data collected from the semi-structured interviews. Placing a greater emphasis on semi-structured interviews data was also based on the fact that the data generated by direct interaction with the participants was more comprehensive and trustworthy than the data collected by a questionnaire.

A conceptual model of data collection and analysis was developed. The model shows that the collected data need to be analysed in two phases. In the first phase, the data from the questionnaire and semi-structured interviews is separately analysed. In the second phase, the
separately analysed data is integrated to draw findings. An outline of the conceptual model is provided in Figure-1.

Figure 1

**Data Collection and Data Analysis**
As a first step, responses to the questionnaire were summarised using a spread sheet. Responses to each question were summed up in terms of frequency and percentages to identify the strength of each response.

Using the qualitative data analysis strategy, first the interview data was transcribed though a professional transcriber. The transcribed data was analysed in three steps by using a coding scheme. The coding process was performed using a spread sheet. In Step-1, textual codes were assigned to each concept or phrase that was relevant to our unit of analysis. This provided a condensed form of large data codes. This data was then further processed in Step-2. The process in Step-2 led to draw specific categories from the data processed in Step-1. Finally, in Step-3, the data refined under Step-2 was further refined to select final categories. The process in Step-3 involved comparing categories with each other and linked to the four research questions. The Step-3 produced 19 broad categories which were representing the explanation of four research questions in this study. This enabled the researcher to draw conclusions from the semi-structured interview data. The concepts of grounded theory (Strauss and Corbin, 1990) were used for assistance to develop the coding scheme and drew final categories.

The data analysis produced two sets of data: one from the questionnaire, and the other from semi-structured interview. This posed the question of how to integrate both sets of data. This would be achieved by a having good understanding of the questionnaire data, and its relationship to the data from semi-structured interview. Another, concern was finding relevance of integrated data with the real context of research questions being investigated. As no established procedure for analysing data from two sources was available that could be used to draw integrated findings, the cognitive processing theory framework by Flower and
Hayes (1981) was applied. The cognitive process theory of writing by Flower and Hayes (1981) stipulates four elements that need to be considered before writing up any topic. These include: paying attention to the distinctive thinking processes that the writer organizes during the act of composing, these distinctive thinking processes should have a hierarchical organization, the act of composing should itself be a goal-directed process, writers create their own goals to serve the purpose of writing and also generate new goals based on what has been learnt from the act of writing. Keeping this approach both on the background and foreground of data analysis, the questionnaire data was divided into two major sections. The first section comprised an interpretation of demographic aspects, and the second section comprised findings from owners-accountants relationship, use of AIS, and owners’ financial literacy. This division was used as a tool to achieve two broad objectives in integrating the final findings: (1) to draw findings that had demographic affects on the findings from the semi-structured interviews data. This helped to draw final integrated findings, which were relevant to the context of our research questions; and (2) linking parts of Section-2 of the questionnaire’s findings that had higher relevance to the 19 broad themes that were drawn from semi-structured interviews data. This helped to obtain integrated findings that had relevance to the context of research questions in this study.

3.6 Data Reliability and Validity

This study applies the criteria of assessing the issues of data quality, and findings’ validity as suggested by Guba and Lincoln (1994). The reason for using this criterion is that in qualitative type of studies where measurement and standardization are not the objective, measuring external validity is problematic. For instance, it is not possible to put a hold on the participants’ circumstances during which they expressed their business knowledge and experience to certain questions discussed during that research. This illustrates the limitation of qualitative study approach in achieving external validity.
Credibility in qualitative studies is accomplished by two methods: triangulation and respondents’ validation. A triangulation approach for data collection was adopted for this study to achieve the objectives of credibility in data collection and data analysis. The triangulation approach was developed by Webb et al. (1966). This approach adds internal validity to findings as it uses more than one source of data for investigating a social phenomenon (Bryman & Bell, 2007). A process of cross-check of data collection resources in triangulation approach increases the likelihood of eliminating errors in data collection phase. This in turn contributes to a higher level of confidence in achieving reliable data analysis and validity of findings. Data was collected by a questionnaire and conducting a semi-structured interview for this study. Responses to the questionnaire were further elaborated during the semi-structured interview. This produced a dually-tested rich research data. The data was then analysed to draw findings to the study. The following description explains how the triangulation approach contributes to the internal validity (credibility) of data in this study.

Observers or researcher’s biases are considered a major concern of affecting the reliability of the data collected. Observer’s bias was assessed from the point of inserting misleading questions, and questions that could be considered out of context, or which does not fit into the parameters of the research. To cope with this issue, a non-probability sampling method was selected to reduce the likelihood of the observer’s biases being assigned to any particular participant. Further, questions in the semi-structured interviews and questionnaire were mostly framed after comprehending a good insight from previous studies performed by other scholar in identical areas. In particular, studies by Halabi et al. (2010), Dyt and Halabi (2007), and Marriot and Marriot (2000) were examined for formulating questions. Intensive deliberation was also exercised in the design, structure and nature of questions set in the
questionnaire. The semi-structured interviews were comprised of open-ended questions allowing plenty of options to the participants to express their feelings. Open-ended questions were used as a lever allowing flexibility to the participants to express free opinions. The interview data was transcribed by a professional transcriber. Using the services of a professional transcriber was intended to prevent researcher bias in the transcription process, which in turn would lead to a more accurate record of the interview.

The second facet of credibility that pertains to respondents’ validation is intended to be achieved by providing the participants a copy of the findings of this study. A clause of this effect was included in the Information Sheet, which was provided to the participants before getting their consent of participation in the research. The clause informs the participants that they shall be provided a report on the findings of research. Providing findings’ report to the participants advocates the philosophy of transparency being not hiding any fact relevant to the study.

To achieve external validity (quantitative studies), or alternatively transferability (qualitative studies) of findings, the data analysis process was supported by relevant excerpts from the semi-structured interviews’ transcription. A copy of Confidentiality Agreement signed by the transcriber is attached at (Appendix-5). These excerpts explained the findings from the participants’ point of view. These excerpts explicitly provide respondents’ elucidation on certain phenomenon that they experience in their business environment.

The objective of dependability from a qualitative point of view, which is called reliability in quantitative studies, was accomplished by keeping a comprehensive record of all data collection and data analysis processes. A complete record of this research study in the form of
transcriptions of interview, completed questionnaires, signed participants’ consent forms, spread sheets of data analysis of questionnaire, and semi-structured interviews have been made available to the supervisor for critical discussion, and audit.

3.7 Ethical Issues

Two broad ethical issues from the researcher’s perspective were required to be addressed in this study (1) the researcher’s influence on participants during the process of data collection, and (2) the risk that participants may experience discomfort while responding to commercially sensitive questions. The issues of researcher’s biases were resolved by disseminating the principles of reliability and validity during the data collection and data analysis by designing questions that eliminated the researcher’s influence on participants for getting any desired response. The issue of participants’ sensitivity to certain questions was addressed by advising participants not to answer to any question that conflicted with their privacy. Participation in the research was voluntary; this also eliminated the chances of influencing the participants. All these concerns were addressed in the AUT Ethical Committed application form. A copy of AUTEC approval is included in (Appendix-6).

3.8 Conclusion

Planning a well structured and comprehensive research design was one the primary objectives of this empirical study. An analysis of the extant literature on research design provided a conceptual framework to plan and implement each component of the research design for this study. The research design was started by getting a comprehensive understanding of the research questions. This led to the next stage to make a decision about the participants and sample size. An approach was then developed to collect data by two instruments comprising a questionnaire and semi-structured interviews. Weighing the strength and weaknesses of qualitative and quantitative research strategies, a mixed method strategy was desired for the
data collection. Whereas the data analysis was conducted using a qualitative approach. A conceptual model for data collection and analysis was developed for this study. Before designing the data collection, data analysis, and standardization requirements for the study, attention was directed to the quality of data. This was achieved by incorporating the principles of reliability and validity as suggested by Guba and Lincoln (1994). This required using credibility, transferability, and dependability for internal validity, external validity, and reliability, respectively.
Chapter 4:
4.1 Questionnaire Findings
4.1.1 Introduction

Chapter 3 described the research design used in this study to empirically examine the four research questions. This chapter has two main sections. Section 4.1 highlights the findings drawn from the questionnaire. Section 4.2 presents integrated findings drawn from the questionnaire and semi-structured interviews.

Section 4.1 is structured as follows. Demographic view is described. This is followed by findings related to owners-accountants’ relationship. Next, findings on accounting information use are explained, and then the findings relate to the owners’ financial literacy is described. Finally, a summary is presented.

4.1.2 Demographic View

A demographic view of the 12 small business owners operating in Auckland, New Zealand, is provided in Table 1 and Table 2. Table 1 (p.46) show that 40 percent (5/12) participants operated as a retail business, two were wholesales, three were services providers, one was a transporter, and another one was a restaurateur. Over 90 percent (11/12) of the participants had full control on their business operations, and were managing their business affairs without employing professional or financial managers for support. Only one participant whose annual turnover was over $900,000 employed a full time manager to assist him in the operation of the business. From the business experience perspective, the retailers group had the greatest business experience. 40 percent (5/12) retailers had business experience ranging from 1 to 10 years. 80 percent (10/12) of the participants had registered their businesses as private limited company. Of these five were retailers. Whereas, only one participant had a
partnership type of ownership structure and another one operated as a sole proprietorship. The majority of the participants were from retail and wholesale. Other demographic data indicates that seven participants did not use external funding to finance their business operations. Though small business owners in NZ are not required to produce financial reports, all 12 participants were found to be preparing their financial reports to satisfy their taxation related obligations.

Table 1: Business Type, Ownership Structure, and Business Experience

<table>
<thead>
<tr>
<th>Business Type</th>
<th>No</th>
<th>Ownership Structure</th>
<th>Business Experience</th>
<th>Full Time Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pvt. Ltd Co.</td>
<td>Partnership</td>
<td>Sole Trader</td>
</tr>
<tr>
<td>Retailers</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Wholesalers</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Service Providers</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Transporter</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Restaurateur</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>10</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Analysis of Table 2 shows that nearly 70 percent (8/12) participants had an annual turnover up to $300,000 or less, and majority of them were from the retailer/wholesale group. Only one retailer had an annual turnover over of $900,000. One participant declined to reveal his estimated annual turnover.
Table 2: Annual Turnover

<table>
<thead>
<tr>
<th>Business Type</th>
<th>No</th>
<th>Up to 300,000</th>
<th>$300,000 to 600,000</th>
<th>$600,000 to 900,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retailers</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1*2</td>
</tr>
<tr>
<td>Wholesalers</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Service Providers*1</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transporter</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Restaurateur</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>8</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

*1. One Service Provider declined to disclose his annual turnover
*2. This Retailer’s annual turnover was above $900,000 turnover

### 4.1.3 Owners-Accountants Relationship

Responses to the questionnaire indicate that over 90 percent (11/12) of the participants engaged external accountants to assist them in managing compliance related obligations and financial aspects of business operations. Of these, over 80 percent (10/12) were satisfied with the advisory services their accountants were providing. Two thirds of the participants were receiving GST returns, Profit and Loss (P/L), and Balance Sheet (B/S) from external accountants. Nearly 70 percent (8/12) participants had a business relationship with their external accountants which extended from one to six years. These results are summarised in the Table 3 (p.48).
Table 3: Owners and Accountants Relationship

<table>
<thead>
<tr>
<th>Results</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of participants who engaged external accountants</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Satisfaction with accountants’ services*</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>No. of years of relationship with external accountants:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>6-10 years</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Not hired external accountant</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Reasons for hiring accountants:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax, Profit and Loss, Balance sheet</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Tax and all financial reports</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tax only</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tax, P/L, B/S</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

* This not includes one participant who did not hire an external accountant.

4.4 Accounting Information Use

While the questionnaire responses showed over 80 percent (10/12) participants believed they had basic computer skills and understanding of computer use and its benefits, only 25 percent (3/12) participants acknowledged operating a computerized accounting system. The remaining nine participants were using non-computer assisted methods to record their business transactions. Only one participant generated P/L, B/S, Cash Flow, Ratio Analysis, Accounts Receivable and Accounts Payable reports. A further two participants were generating reports with different combinations, such as one was generating P/L and B/S, while the other was preparing P/L, B/S, A/R, and A/P. Two participants used accounting software MYOB\(^1\) and Tally\(^2\), whereas, one participant was using MS Excel and Word, to maintain their accounting records. Table 4 (p.49) shows findings on uses of accounting information systems.
Table 4: Use of Accounting Information System

<table>
<thead>
<tr>
<th>Results</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of participants who had computer literacy skills</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>No. of participants who maintained computerised accounting record</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Reports produced with computerized accounting:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P/L and B/L</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>P/L, B/L, A/R, A/P</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>P/L, B/S, Cash flow, Ratio Analysis, A/R, A/P</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Computerised accounting software:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MYOB</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Tally</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>MS Word/Excel</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>None</td>
<td>-</td>
<td>9</td>
</tr>
</tbody>
</table>

4.1.5 Owners Financial Literacy

From the questionnaire responses, 75 percent (9/12) of the participants were found to be satisfied with their business performance. From the perspective of participants’ preference of financial reports that assist them in decision making in terms of very useful, useful, and not useful, only 25 percent (3/12) participants acknowledged that P/L, B/S, Cash flow, A/R, and A/P were very useful reports that helped them in making business decisions. 50 percent (6/12) participants offered mix responses on the level of usefulness of different reports, of which 40 percent (5/12) considered P/L and B/S useful in making decisions. 25 percent (3/12) participants found financial reports not useful in making business decisions. Over 40 percent (5/12) participants prepared financial reports once a year, whereas three participants prepared financial reports on a monthly basis. Table 5 (p.50) represents various findings on the uses of financial reports.
Table 5: Uses of Financial Reports

<table>
<thead>
<tr>
<th>Results</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Satisfaction with Business Performance</td>
<td>9</td>
</tr>
<tr>
<td>Frequency of preparing report in a year:</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>3</td>
</tr>
<tr>
<td>Quarterly</td>
<td>2</td>
</tr>
<tr>
<td>Biannual</td>
<td>2</td>
</tr>
<tr>
<td>Annual</td>
<td>5</td>
</tr>
<tr>
<td>Financial Information assist in decision making:</td>
<td></td>
</tr>
<tr>
<td>P/L, B/S, Cash flow, A/R, A/P:</td>
<td></td>
</tr>
<tr>
<td>(Very Useful)</td>
<td>3</td>
</tr>
<tr>
<td>(Useful)</td>
<td>1</td>
</tr>
<tr>
<td>P/L, B/S (Useful)</td>
<td>3</td>
</tr>
<tr>
<td>P/L, B/S (Very Useful)</td>
<td>1</td>
</tr>
<tr>
<td>Misc (Mix response)</td>
<td>1</td>
</tr>
</tbody>
</table>

4.1.6 Summary

Part 1 of Chapter 4 discussed the findings drawn from the data collected from the questionnaire. The findings are grouped into four categories:

- The Findings on Demographic Situation
- The Findings on Owners-Accountants Relationship
- The Findings on Accounting Information Use
- The Findings on Owners Financial Literacy

These findings highlight the NZ owners’ perceptions regarding the adoption of an AIS and its importance in producing different financial reports. The findings also show some major reasons of hiring external accountants, and the position of owners’ financial literacy.
4.2 Integrated Findings

4.2.1 Introduction

Section 4.1 explained the findings drawn from responses to the questionnaire. The findings from the questionnaire responses provide an incomplete picture of this study as the semi-structured interview responses inform understanding of the questionnaire responses. This section combines the data analysis of questionnaire and semi-structured interviews to draw integrated findings.

The integrated findings described in this section are structured as follows:

- Section 4.2.2 deals with the findings on RQ-1 on ‘Use of Financial Information in Decision Making’
- Section 4.2.3 shows findings relevant to RQ-2 on ‘Barriers to Financial Information’
- Section 4.2.4 to 4.2.5 explains findings on RQ-3 on ‘Role of AIS’
- Section 4.2.6 to 4.2.8 shows findings on RQ-3 on ‘Owners-Accountants Relationship’
- Section 4.2.9 to 4.2.13 shows findings relate to RQ-4 on ‘The Implications of Owners Financial Literacy

4.2.2 Use of Financial Information in Making Critical Business Decisions

To gain a deeper understanding of how financial information assists in decision making, participants were asked to describe their critical business decisions and what kind of information they used to make these decisions. The investigation revealed that only 25 percent (3/12) participants used financial information from financial reports in arriving at their critical decision making. 75 percent (9/12) participants were not using financial information in their critical business decision making. About 33 percent (4/12) of these participants responded that they used their business experience to make decisions relating to their business, the remaining 40 percent (5/12) had other individual practices for making business decisions. Those who were using financial information in making their critical decisions had business and accounting related qualifications and experience. On the question
what were the owners’ critical business decisions, half of the participants described buying and selling as their critical business decisions. Of them, 25 percent (3/12) considered price planning as an important factor for their business management. One participant, who was an ex-chartered accountant by profession, considered cash flow management as his primary concern and that all decision making was influenced by this concern:

“The main business decisions are cash flow which has to be monitored on a day to day basis. It has to be done on a very regular basis. Based on all these you decide on your loan structuring, the bank financing, your new investments, your performances of various businesses that you are running, the performance of the various assets which you have made investments in. All those things have to be constantly monitored and decisions have to be made from time to time”. (Retailer-1)

Responding to the question regarding the use of financial information for these decisions, the participant replied:

“Yes, annual accounts does help you making a lot of decisions, but besides that a lot of time when you approach financial institutions for a new loan or mortgages etc., they do require medial [quarterly] accounts and medial [quarterly] analysis which has to come from an independent source, so they come from your accountant”. (Retailer-1)

One participant who perceived market planning an important element of critical decision making, said:

“I mean if we have to improve the business, if the business is going slow, then we have to do marketing which is expensive. So we have to find a way out which is cheaper and fruitful, and which we feel is good for our business. Particularly we have to improve [services] to attract the customers. We have to do that and that is what we are doing”. (Mechanical Services-2)

That participant agreed that using financial information for these critical decisions was important.

“Without financial information we can’t do anything, if we don’t have finance – we even can’t print flyers, to print that we need the money. If we don’t have information about our financial position – how can we do that? So definitely it is very important for that [to have financial information]. On the basis of our finances we can take any step”. (Mechanical Services-2)
Another participant, while disclosing that buying and selling was his critical business decision, said:

“You had to see – you had to make the decision to sell for a certain price, whether you make a profit or not. You have to take the decisions while you’re selling. You have to take the decisions when the customer comes back with any kind of problem. Sometimes if you don’t take a decision on right time, hundred percent there will be a sales return. Another thing – the most important part is like you need to make a decision while you’re buying. While you are selling you may not make the money but you make the money while you’re buying. If you’re buying is good that means you’re selling will be definitely profitable”. (Wholesaler-2)

That participant had no intention to use financial information in decision making. Responding to the question whether financial information is used for making these decisions, the participant said:

“You can use financial information when you have a large business, or sum of money, then you will need an accountant to help you how to spend that money”. (Wholesaler-2)

This participant had recruited an unqualified accountant. The accountant’s services were mainly used for GST, and other tax related obligations. Despite a full time unqualified accountant, the participant was not willing to maintain an AIS. The participant was using cheque butts and bank statements for measuring business performance. He believed that financial information can be used in making business decisions only if the firm had large amount of surplus cash.

Another participant believed recruiting the right employees, and managing financial resources were the critical decisions for his business:

“Start up is the most critical decision. Once you get settled and organize your resources [money, staff, customers], then you find the right employee. The other main critical area is resources. And resources must be somewhere around in your place, where you’re working. And you need employees also staying nearby you. So, it is all that how you choose your employees and how you choose your resources. Each point is a critical point”. (Electrical Services)
This participant stated that he never used any financial information for making his critical decisions:

“No financial information helps in decision making. It is all your personal, personal experience. Sometimes you make mistakes but you don’t make mistake again. So that is personal abilities and all that. But the accountants they don’t help anybody to make any critical decisions”. (Electrical Services)

Critical decisions for half of the participants related to managing inventories, managing marketing functions, and customers’ satisfaction. One of the participants was not willing to recognize the role of planning critical decisions for the success of a business. The participant personally considered that critical decisions were just word of mouth:

“A lot of our critical business decisions are words of mouth. I even have not printed my business cards in the past five years. All my customer dealings are on words of mouth. It is a family to family, or person to person business. That’s the only thing we go through to make our business run”. (Mechanical Services-1)

4.2.3 Barriers to Financial Information

This section explains findings relevant to RQ-2. Barriers to financial information mostly arise from the way the owners organize and manage their business operations. For convenience, these barriers have been grouped into two categories: (1) internal barriers, these emerge from the owners’ psychological attitude; and (2) external barriers, these arise from the factor external to the business.

Internal barriers reflect an owner’s psychological attitude with which he or she manage and organize his or her internal business processes. The findings reflect some aspects of the participant’s attitude concerning over-confidence on personal experience, misperceptions about the size of business transactions to avoid proper accounting system and its potential adverse effects on business, showing no interest in getting advisory services to resolve business issue, and adopting unreliable measure for evaluating business performance.
Financial constraints that restrict owners’ access to implement their business plans, lack of
time to get trained, and learning of financial skills were found to be the few other barriers that
stop owners using financial information in decisions making. Excerpts from the interviews
indicate participants’ attitudes.

Identifying a lack of timeliness as a barrier to obtain information from an external accountant,
a participant responded:

“Most of the times he [accountant] will come and tells me that he’s done everything. But I just
don’t have the time to sit down and talk to him, you know”. (Mechanical Service-1)

Another participant, while under-estimating the role of planning in business management,
said:

“What I feel personally, truly, whatever you can plan … but when it comes to practice, it will be totally
different from the theory. Sometimes, like I’ll see in my bank account that I may have $1000. I’ll plan
it. Like maybe I’ll use this money here and there. But that’s our theory. Like, we’ll plan it, I may use it
here and there, but maybe next day or maybe after a year or even in two hours, something may come
up, you may need to spend that money. So that’s why it’s not a thing you need to plan it, and maybe it
may not work. We [need] to go with practical business events”. (Wholesaler-1)

External environment oriented barriers include the different aspects of the owners-
accountants’ relationship, and other factors on which the owners have no control, such as
legislation and external market conditions. For instance, from the owners-accountants’
relationship perspective, accountants’ slackness in supplying financial and non-financial
information to their clients that assists them to resolve their business problems by making
right decisions is a simple illustration of an external environment barrier. One participant
responded to the question as follows:

“I’ll give you an example. He [customer] came into get his gear-box done. He’ll leave it in my hands.
He expects that I’m the doctor, you know what I mean? So basically when your [customer] car comes
channeled through this driveway, it means that I understand what you want me to do. I give you what
you want to the best of my ability. I mean the guy down the road he can take the same job and he can
give you the best of his ability, but again everything goes under experience. I mean in the last five
years I know that I haven’t asked questions from my accountant, he hasn’t given me a lot of ideas. But
in terms of that, ‘Yes’. The more the information are the more better they are. But, we haven’t been asking them [accountants] any questions. We’re just happy that he does the job, everything’s done. We pay him and that’s it”. (Mechanical Services-1)

Lack of training opportunity to learn computing, business management skills, and market constraints are other examples of external barriers. One participant did not like using financial information in decision making because he believed the market was the determinant element that assisted decision making. The participant explained:

“Actually we look to the market and similar businesses in the area, that how those people – what tactics they’re using to run their businesses, and how we can appreciate [develop] our business by offering more quality, and make it cheaper as we can, as a competition. To attract more customers, that’s the main thing we can use”. (Restaurant Owner)

4.2.4 Role of Accounting Information System

This section related to RQ-3. It has two parts. Part 1 explains findings of the role of AIS. Part 2 describes findings of the owners-accountants relationship. An explanation of findings regarding the role of AIS follows.

While over 80 percent (10/12) participants considered themselves computer literate, only three were using a computer to maintain an accounting record. Of these three, only 25 percent (3/12) were using full accounting packages such as MYOB and Tally, and the other one was using a combination of MYOB and Microsoft office. These participants were using computerised accounting systems as a convenient aid for generating a variety of desired reports, such as inventories’ movement, P/L, and B/S. They described the computerised accounting system as assisting them in understanding the financial position of their business operations and controlling different business processes. A participant, who was using a computerized accounting system, responded:

“Yeah definitely it’s easy to assess your progress of business within a second. You can know what’s the profit, what the loss is and what’s the cost of your stock and which price you can buy and which
price you can sell from your stock. All these things, you must, I think need an accounting system; without it you can't manage your accounting work”. (Wholesaler-2)

Another participant described printing invoices and understanding inventories’ status as the main benefits of a computerised accounting system:

“It will – like it [AIS] will help you a lot. We can – like the main benefit for us is we can generate our own invoices, we can keep track of our inventory and we can generate a lot of reports through it”. (Retailer-2)

Almost 75 percent (9/12) participants were using different kinds of manual methods to record their cash receipts and cash payments. These methods generally included using cheque butts, bank statements, invoices’ record, and diaries as source for ascertaining their business performance. Table 6 (p.58) provides an overview of the kind of accounting record maintained by different participants. One participant provided the following explanation of how he maintained his accounting records:

“If we sell something we issue a receipt and receipt book is with me. I can find out how much we earned in this week and how much are the expenses. Because we have accounts with different suppliers, at the end of a month they give us an invoice. Another invoice balance to pay for the purchases for the month, so at the end of every month we can find out how much is our income and how much are our expenses”. (Mechanical Servies-2)
### Table 6: Sources of Recording Receipts and Payments

<table>
<thead>
<tr>
<th>Participants</th>
<th>Receipts</th>
<th>Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retailer-1</td>
<td>Accounting software</td>
<td>Accounting software</td>
</tr>
<tr>
<td>Retailer-2</td>
<td>Accounting software</td>
<td>Accounting software</td>
</tr>
<tr>
<td>Retailer-3</td>
<td>Diary</td>
<td>Diary</td>
</tr>
<tr>
<td>Retailer-4</td>
<td>Bank statements. No record for cash- cash is deposited in bank</td>
<td>Internet Banking. Bank Statements. Cheque Butts</td>
</tr>
<tr>
<td>Retailer-5</td>
<td>Cash register, Invoices Receipt book</td>
<td>Cash register, Cheque Butts</td>
</tr>
<tr>
<td>Wholesaler-1</td>
<td>Cheques</td>
<td>Cheque butts</td>
</tr>
<tr>
<td>Wholesaler-2</td>
<td>Accounting software</td>
<td>Accounting software</td>
</tr>
<tr>
<td>Mechanical Services-1</td>
<td>Software and manual</td>
<td>Software and manual</td>
</tr>
<tr>
<td>Mechanical Services-2</td>
<td>Receipt book</td>
<td>Payment diary</td>
</tr>
<tr>
<td>Electrical Services</td>
<td>Invoices. Cash receipts</td>
<td>Cheque butts. Paid invoices</td>
</tr>
<tr>
<td>Transporter</td>
<td>Bank Statement</td>
<td>Cheque butts</td>
</tr>
<tr>
<td>Restaurant Owner</td>
<td>Cash register</td>
<td>Diary. Paid invoices</td>
</tr>
</tbody>
</table>

#### 4.2.5 Problems in Accessing an Accounting Information System

A variety of responses were offered to describe the potential difficulties in obtaining and running a computerised accounting system. The findings show that 33 percent (4/12) participants were not aware of the benefits of computerized accounting system. They thought they did not need a computerized accounting system for their business. However, another 25 percent (3/12) participants who wanted to install a computerized accounting system described how the installation and maintenance cost, a lack of motivation to learn, and a lack of time to operate the systems prevented them from doing so. One participant described his situation:
“Should be [AIS advantages], if you’ve got time because I’m standing here and I don’t have time to do all those computer stuff; accountant does all those things for me. But maybe it could be beneficial but not for me because I don’t have time to learn all those things”. (Retailer-5)

Another participant, who was prevented from obtaining a computerised accounting system, described a lack of confidence in his financial literacy skills as the main impediment. The participant said:

“Because I don’t have that much confidence [financial skills], so I find it difficult to keep a computer record. So usually I have to wait to have a computerised system”. (Retailer-3)

This response indicates that participants who lack financial literacy skills also face problems in implementing a computerized accounting system for recording business transactions. Their lack of financial literacy skills prevented them in understanding what financial information they needed to record, how to retrieve the desired information, and how to interpret financial information. There were also responses on the necessity to have previous experience in operating a computerized accounting system, and regular training to keep updated with software and hardware technologies. One participant explained his situation:

“I know how to use the computer but like accounting work is hard, I’m not very good in accounting to use computers, like it’s a bit complicated for me, the calculation and the stuff so that’s why I’m not really using computer, and I do not prefer to have a computerized accounting system”. (Restaurant Owner)

For another participant, cost and his business size were the grounds for not installing a computerised accounting system. He explained:

“Yes, I’m happy with it [manual record keeping] because it’s a small business; it doesn’t draw that many customers in. I mean we get a flow of work but lately. I thought about it [AIS]. I have thought about getting a computer system. But so far yet because everything’s so costly to get up and going and the money factor does come into effect. Manual system seems to have worked okay for now”. (Mechanical Services-1)
4.2.6 Owners-Accountants Relationship

This section explains findings relevant to part 2 of RQ-3. These findings are explained in Sections 4.2.6 to 4.2.8.

4.2.7 Reasons for Hiring/Not Hiring External Accountants

Nearly 70 percent (8/12) participants acknowledged that they hired accountants for three main services: tax compliance, P/L, and B/S. Lack of time, lack of financial skills and knowledge, and the need to concentrate more on business management were found to be the key drivers of hiring external accountants. One participant explained the reason for hiring external accountant:

“The main reason was our tax matters and the financial reports because sometimes even to deal with the bank and other things they need the financial reports from our accountant. So that’s why we need to hire an accountant”. (Retailer-2)

Another participant, who was a Chartered Accountant, had engaged an external accountant mainly to get enough time to focus on expanding his business:

“Because I wanted to concentrate on the business and let the job of creating balance sheets and profit and loss to accounts and the job of filing tax returns and GST returns to an external account, so that he can concentrate on the accounting aspect of the business and I can concentrate on the management aspect of the business”. (Retailer-1)

Another participant confirmed that the main reason for hiring accountant was to free up time. The participant said:

“It was basically time, just to free up time so that I could concentrate on managing the operations; business operation”. (Transporter)

Reasons for not hiring external accountants were that the owners employed non-qualified accountants, and the owners had accounting and business related qualifications. Finding a cheap alternative for an external accountant and to exercise full control over the business were the few benefits that the owners presumed would be acquired if they did not engage
external accountants. One participant who had business related qualification mentioned that he did not need external accountant.

“Actually I have an accounting background; my qualification is in business and commerce. I also have qualification in accounts. So I don’t need to hire an external accountant. I can easily manage all my accounting matters by myself”. (Wholesaler-2)

Another participant hired a non-qualified accountant to reduce his expenses. He said:

“During first six months when we opened the company, like it was two years before we had an external accountant, but then we realized that non-qualified accountant can do [better], we can do it by our-self like paying the GST and doing the tax returns”. (Wholesaler-1)

4.2.8 The Implications of Owners-Accountants Relationship

Over 80 percent (10/12) participants were satisfied with the services provided by their accountants, and of these six participants had never changed their accountants. This satisfaction was based on the accountants’ cooperation in allocating sufficient time, ease of availability, and competitive charges. Only 25 percent (3/12) participants thought they were getting value for the money they were paying their accountants. Another reason for not changing accountant included participants’ satisfaction on previous services and the trust that developed over time. The participants acknowledged that their accountants helped them to understand the financial information contained in the financial statements. They also recognized that this information was assisting them to understand their business progress, inventory position, taxes and profit and loss position. One participant said:

“Their [accountants] services are very good and they look after the accounts and other things. They discuss ideas, and tax and GST, and everything goes on time”. (Retailer- 5)

Another participant said:

“He [accountant] delivers, that’s the most important thing. Whatever – in the last 7 years 8 years which he’s been assisting me for all my businesses. He does everything in time, e.g. filing the GST return in time, filing the tax returns in time, making the balance sheets in time and all the financial data in time. That is the most important thing, and he’s always been able to advise me of all the taxation
requirements, all the financial requirements, the legal requirements, as and when they required”. (Retailer-1)

Nearly 35 percent (4/12) participants were not satisfied with their accountants and had changed their accountants. The major reasons of dissatisfaction included: the accountants were very busy, they were not dealing with the owners’ directly, and their fees were higher. In this context, one participant said:

“I had an accountant, he was an old guy, and then I changed him like after a year. The reason was that he was not dealing with me directly. He had an office lady; he had two office ladies and most of the time he used to away from the office. So that’s why I changed my accountant, and the one now I have is very cooperative, helpful and also easy to understand his work. That’s the main reason I changed the accountant”. (Restaurant owner)

Two participants believed that their accountants did not assist them to understand the financial information supplied. They complained that they had to ask the accountant for explanation of the financial information provided. One participant said:

“I had to ask otherwise they are business doing accountants of two or 300 small businesses, so they don’t have that much time. But once you need something, like when you want some explanation of information, or the guideline or something, then they look at the format [financial statements] and they guide you for that particular situation”. (Electrical Services)

4.2.9 The Implications of Owners’ Financially Literacy

This sections deal with the findings relevant to RQ-4 on the implication of owners’ financial literacy. These findings are explained from section 4.2.9 to 4.2.13

The findings suggest over that 80 percent (10/12) participants had confidence in their financial literacy skills and knowledge in dealings with the financial aspects of their business operations. The remaining two participants were not confident with their financial literacy skills. This finding was investigated from two different perspectives. One, how these owners
evaluate their business performance. Two, to what extent owners understand and interpret financial reports. These are explained as follows:

4.2.10 Measuring Business Performance

To understand the strengths or weaknesses of the owners’ financial literacy, the study examined whether owners evaluate the performance of their business, and if ‘Yes’, then how they did it, and how they used this information in decisions making. The findings show that all the 12 participants were evaluating their business performance by using different organizational practices. The use of financial information for decision making was different from one organization to another. Half (6/12) of the participants used cash and cash equivalent assets as their primary tool of assessing the performance of their businesses. One participant described:

“My own accounts tell me where I am, whether I’m good or bad [from financial aspects]. Like, mainly with the income, and outgoing expenses, when we can meet our outgoing expenses easily, and apart from that we are having some cash or balance [left] to buy some new things, then we think we are doing well”. (Retailer-3)

Another owner responded that the more his turnover and money at bank grew, the better his business was performing:

“My cash flow tells me a lot, whether the money coming in or money going out, ‘you know’. If my stocks [turnover] are growing bigger and my bank balance grows. It is easier; it tells me that I’m doing alright in my business”. (Retailer-4)

Growth in turnover, payment of accounts payable on time, and money at bank, were considered by the participants to be their measures of assessing the performance of businesses. A participant said:

“Because I always check my turnover and I want to see my turnover go higher and higher from the previous year. And then we started like bifurcating [divided] business into some different areas and then you know, we always want to keep busy and that’s how we see how much money we’re making and how much money is in our bank account. And also we see that we are not stopping anybody’s
payment; and that nobody is ringing me to say “oh your payment is due”, before they fall I always pay my bills. So then you can, yeah, that’s how you can judge your financial conditions”. (Electrical Services)

4.2.11 Other Methods of Measuring Performance

The investigation shows that each participant was using a different approach of measuring business performance. For instance one participant explained that he was using a simple way of evaluating his business performance:

“I’m a very simple person. I do things in simple way. For example, when I do [calculate] the tax for three months, I’ll see, if I earn $15,000 and if I pay $14,000 to someone that means that I earn a $1,000 – that’s my profit. Because our business is – like we do car business that means when I bought the car for $5,000 and I sell it for $7,000 that means I make $2,000. From $2,000 if I pay for warrant, registration, service and all that stuff – after all that stuff if I’m left with $500 that’s my profit. So easy stuff, easy accounting”. (Whole Seller-1)

One participant explained that he understood his business performance from income and expenses:

“We can see from our sales. What are my total income and my total expenses, and what money I have got”? (Mechanical Servies-2)

Another participant while commenting on the importance of financial skills for business, said:

“Like, my thinking is that, it’s really difficult to do anything if you don’t have the basic ideas of what you’re doing [referring to uses of financial information in business]”. (Retailer-2)

Two of the participants were, however, not satisfied with their financial literacy skills. One thought external elements determine the level of financial position of business and therefore there was no need to learn or develop any financial literacy skills. The participant explained his understanding in this way:

“In fact, it is the local market that makes our business good or bad. Initially, the market was too good [in the past]. So it wasn’t really the skill, but it was the market [that helped in getting good results]. The overall market was not good during 2007–8 because of the recession in market. So we had to sell many of our cars under-prices, and ultimately we’ve been kicked out of the business. So from that manner we got a bad financial skill of business”. (Retailer-3)
4.2.12 The Perceptions of Financial Literacy

This study found that nearly 70 percent (8/12) participants considered financial literacy was a progressive phenomenon that built on one’s business experience. One participant described how he learned financial literacy:

“When I started the business I wasn’t that fast and you know sometimes you made some mistakes, and after your make some mistakes you learn some steps. Yeah, like if you are a son of a business man then you’ve platform to learn, you know, because you’ve got so many people working and they will advise you but once you start your own business, you have to – like you make the mistake then you learn or you find out something else. You learning everything, something new and do your plan, you know”. (Electrical Services)

Over 30 percent (4/12) participants believed that academic qualifications in business management, and accounting were the contributory elements in the acquisition of financial literacy skills. For instance, one participant who had a business related qualification, explained:

“I have an accounting background, I have an accounting education but when I started the business, definitely it was a new experience for me but with the passage of time, you know, 3 years has passed – at the start a lot of mistakes happened but with the passage of time my experience, my education, and my business experience helped me to manage this now”. (Wholesaler-2)

Other participants believed that financial literacy was an on going phenomenon that owners develop with their routine business operations, trial and error, judgment, and training. To one participant financial literacy is not something to learn:

“As far as concerned with financial information, it’s not really we need to learn something from somewhere. Yeah, anybody can make it out when the – according to the time. If we’re in a dire need, we can sell things under-cost; and when we are not in a dire need, we can make good profit out of it. So yeah, it’s not really a matter of learning something”. (Retailer-3)
4.2.13 The Role Owners’ Competencies in Understanding Financial Reports

To judge the owners’ confidence on their financial literacy in making business decisions, the participants were asked how they use financial information in their business decisions. This was evaluated from owners’ understanding about the different contents of financial reports.

An analysis of responses to the question to what extent do participants prepare traditional financial statements such as P/L, B/S, cash flow statement, A/R, A/P, and Ratio Analysis. Only 25 percent (3/12) participants prepared financial reports and only one acknowledged that he was preparing all financial reports for use in making business decisions. The other two participants were using a different combination of these reports. Some were using just P/L and B/S, and others were using P/L, A/R, and A/P. Nine participants responded that their accountants prepared these reports just to comply with GST and other tax related obligations. The participants who preferred to generate financial reports had business related qualifications and experience in accounting. They considered financial reports as their main sources of measuring business performance. For instance, one participant who was Chartered Accountant explained that his regular business data monitoring helped him in understanding how his business was performing:

“I constantly analyse and keep on monitoring the data all the time, every single day. So it does give me a very good hold on what exactly is going on in the business”. (Retailer-1)

Two other participants with business related qualifications, said:

“We understand, like, the main thing is the profit and loss, and then also like our expenses; in which accounts we have done the expenses and what is our main profit”. (Retailer-2)

“Definitely, at the end I make my profit and loss, and balance sheet, and only on these two things I decide how is doing my business. I mean the profit and loss and balance sheet”. (Wholesaler-2)

Over 80 percent (10/12) participants responded that they understood the contents of the financial information given in the financial reports. Their interpretation of financial reports
was based on an understanding of business growth, taxation, expenses, accounts receivable, and accounts payable. However, the findings show that only 33 percent (4/12) participants were able to use financial information in decision making, while nearly 70 percent (8/12) participants acknowledged that they did not use financial information to assist them in making their business decisions. Two participants explained how they made business decisions:

“Most of the information is there on the internet, all the financial information, so I can just get it from my bank statement and plan accordingly”. (Retailer-4)

“We can see from our sales, what is the total income and what are the total expenses, and what amount of money we have got. We find out that monthly – basically our tax, GST returns are 2 monthly, so every 2 months definitely we get information”. (Mechanical Services-2)

Another participant was interested to understand movement in his turnover during the year:

“I check how much my turnover is this year, how much [was] monthly or so. Sometimes, I take it monthly, like January, February and so on”. (Electrical Services)

The findings also show that about 40 percent (5/12) participants were able to access their financial statements at the end of a financial year when their accountants prepared financial statements for tax compliance purposes. One participant described that he measured his business performance on a daily basis by comparing daily sales with purchases and expenses. Those participants who had no qualifications and professional experience were using different organizational practices for making routine decisions. These practices involved comparing invoice and receipt books, money at bank, inventory position, and turnover. A restaurant owner who did not maintain any accounting system explained the method he applied to evaluate his daily business performance:

“We evaluate all aspects of our business day by day. By evaluating purchases and sales, times, and wages, everything. We daily evaluate how much we earn in the business, and whether we are going in the profit or loss, or on average”. (Restaurant Owner)
Two participants considered financial reports were not useful for them in decision making.

One of them said:

“That’s quite complicated to understand the balance sheet from the accountant, but we understand our calculations before his [accountant] prepare balance sheet for us; from our day by day sales and purchases. So that’s more easy than the balance sheet, because it [Balance Sheet] comes after six months, two months and a year, but we do every day calculations so that more easy for us”. (Restaurant Owner)
Chapter 5: Discussion and Suggested Intervention Strategies

5.1 Introduction

The application of financial information in organizing and managing a small business was the focus of this study. The findings were drawn from the data analysis which revealed a wide range of managerial and financial issues confronting NZ small business owners. The findings also highlighted the key issues to which participants responded. Following a detailed explanation of these empirical findings in Chapter 4, a debate on the importance of these findings and its comparison with other studies will lead to a discussion of the implication of these findings.

This chapter is structured as follows. A discussion on RQ-1, ‘the use of financial information in decisions making’ and intervention strategies are proposed. RQ-2 on, ‘barriers to financial information’ is discussed and then its intervention strategies are explained. Next, the RQ-3 ‘the use of accounting information and owners-accountants relationship’ is discussed and intervention strategies are suggested. Finally, RQ-4 on ‘owners’ financial literacy’ is discussed along with an explanation of intervention strategies.

5.2 The Use of Financial Information in Decision Making

RQ-1 sought to develop insight into how financial information facilitates decisions making for NZ small business owners. In other words, the question sought to investigate whether the owners were able to manage their business problems, maintain business sustainability, and grow their businesses by using financial information in decisions making. The findings revealed that majority of the owners were using different organizational practices or hiring the services of external accountants to access financial information. Only three owners were
able to access financial information by an internally maintained accounting system. This raises the question what methods were used by the owners for collecting and recording accounting data, and how information from these methods was used in making business decisions. To find an answer of this question, the participants were first asked to describe their critical business decisions. The participants had difficulties in identifying their critical decisions. This was observed during the interviews when the participants requested repetition or rephrasing of questions that were seeking to ascertain their most important business decisions. A lack of understanding of the importance of their critical business decisions is likely to lead to lack of financial planning. A lack of financial planning may also affect the owners control on business management. This stance is consistent with Woods and Joyce (2003) and Deakins et al. (2002) investigations which revealed that the owners usually under-value the contribution and benefits of planning as an aid in business decisions making. This suggests that the owners who are not able to determine what critical decisions are significant for their business success, may also be undermining the importance of preparing plans to organize their financial and non-financial business operations. This finding suggests that firms without a clear strategic direction may face several organizational and financial challenges for the survival of their businesses.

The findings indicate a clear difference in the nature of critical business decisions of participants belonging to retailers and services provider groups. A higher response from participants indicating buying and selling as their most critical business decisions is a reflection of the high number of participants who were retailers and wholesalers. Other responses such as price planning and inventory management also relate to retailers and wholesalers. Customers’ satisfaction, appropriate recruitment, and marketing were the critical business decisions for the group delivering different kind of services. This raises the question
whether both the groups have similar needs of acquiring financial information before making any business decision. If, it is presumed that this distinction also separates the needs for financial information of retailers/wholesalers from service providers that prompts another question regarding how to assess the needs of financial information for each group. Based on the findings, there is strong support for considering service providers as different from retailers and wholesalers. A likely consensus that both the groups differ provides a potential area of further research to assess how each group identifies, assesses, and determines their financial information needs for better business decisions.

The finding that the majority of the participants were not inclined to use financial information in making critical business decisions appeared consistent with their lower priority of not understanding their critical business decisions. While not using financial information in organizational and managerial business processes appears to be an indication of not making relevant and productive business decisions, the question arises what kind of information is used for making business decisions. If business experience is considered their major aid for making business decisions, as the majority of the participants revealed, then the question arises what they meant by business experience, and what factors made the phrase ‘business experience’. The finding indicates that the participants were considering the word ‘Experience’ as synonymous to ‘financial information’. Generally, ‘experience’ can be interpreted as one’s skills, knowledge, and personal instincts acquired over a period of time in a specific environment. From this perspective, it appears that financial information was one of the components of skill and knowledge in the phrase ‘business experience’ that the participants used in responding to the questions. This perception confirms that financial information was actually a part of owners’ perceived experience that they gain over a period of time. However, they intuitively resisted clarifying the meaning and uses of financial
information, when asked to explain. This leads to presume that the participants were using financial information in their business decision but its application, form, justification, and interpretation was different from one owner to another. Considering this logic as a possible explanation of participants’ responses that they used experience instead of financial information may lead to a state of misunderstanding between the extant research on financial management and small business owners. This logic, however, can be applied only to those owners who have operated businesses for a long time, and have been applying their experience in making business decisions. For novice small business owners, the understanding and application of financial information in business decisions can be the only way to keep their business on track. Failure to disregard financial planning can badly affect a new business comparing to an established business.

In summary, this finding suggests that the participants were not well versed with the frequently used term ‘financial information’, and neither did they understand the benefits and implication of financial information for their businesses. These findings suggest that most of the participants did not use financial information in making their business decisions. This finding is consistent with the Halabi et al. (2010) study conducted on Australian small business owners.

5.2.1 Suggested Intervention Strategy

The findings indicate that the participants had more trust on their business experience and using personal practices to resolve financial aspects of their business operations. While the owners past business experience cannot be ignored in the success and survival of small business firms, Ucbasaran et a, (2010) raised questions on the quality of owners’ past business experience. They found that owners with experience of past business failures were likely to exercise more confidence in making more reliable business decisions. Deakins et al,
(2002) recognize that “owners of small business firms use diversity of financial management practices and to resolve this issue a sympathetic and distinctive approach needs to be developed that could be able to tailor different solution for different firms”. Parry, (2010) found that any intervention strategy which conflicts with owners’ personal behaviour would unlikely to succeed unless specific characteristics of owners attitude were not incorporated in such strategies. Where a quick fix seems difficult to influence owners’ behaviour and motivate them to change financial management practices, intervention strategies can be formulated on short and long term basis.

Short term intervention strategies need to be implemented to educate owners on the benefits of using financial management skills and its importance in the success and survival of their business operations. The owners also need to be motivated to improve their existing financial management practices by adopting new techniques and use of computers.

Long term intervention strategies are needed to find a permanent solution to the problems that the owners are unwilling to use the necessary financial management practices as recommended in the accounting literature. Long term intervention strategies also need to be formulated to motivate owners to make more and regular use of financial management skills in their routine and strategic business decisions. This seems to be a complicated process that may be started with the identification of mostly used organizational financial management practices and its comparison with the skills described in the accounting and financial management literature.

5.3 Barriers to Financial Information

RQ-1 discussed participants’ oversight in identifying the nature of their specific business decisions, and the types of information being used for making those decisions. RQ-2 is an
extension of RQ-1. This question was designed to understand what factors were hindering the provision of financial information to NZ small business owners. The researcher grouped these barriers into two categories: internal barriers, and external barriers. *Internal barriers* reflect the owners’ behavioural considerations in the way they organize and manage their internal business processes. A tendency towards relying on experience to manage business instead of realistic assessment of current and future business needs, avoiding learning business and computer skills, showing indifference towards measuring business performance, no interest in business planning, lack of time, and disregarding the need of an accounting system, were the basic barriers that prevented participants concentrating on the financial management of their businesses. This implies that the owners’ attitude is actually the main barrier restricting them from using financial information to assist in decision making (Chaganti, 2002). This raises the question of why owners concentrate more on the administrative aspect of business and pay little or no attention to the financial aspects of their business. There appears to be two possible answers to this question. First, the owners are completely unaware of the benefits of using financial information in making business decisions. Second, the owners are financially literate but they avoid using financial information for assistance in making business decisions. This category of owners most probably prefers managing business that matches with their personal life style and do not pay much attention to adopting a professional and responsible attitude in the management of their businesses. These findings are consistent with Brown & Walker (2004), and Getz, & Carlsen, (2005). Both the situations can be vulnerable to the survival of a small business. The former category of owners is highly exposed to different types of business failure risks, whereas, the latter category of owners can overcome their business management problems by making positive changes in their behaviour. It is probably the most difficult area in empirical studies to probe owners’ personal instincts, identify and evaluate their relevance to the study, and
then place these in desired categories for drawing conclusions. The findings in this study also suggest the same situation. There were two groups of participants. One group of participants was completely unaware of the benefits of using financial information in business decisions. They had no knowledge of financial management. The other group of participants knew the benefits of financial information in making business decisions but they were reluctant to use them in the business context. They believed that their personal skills based on past experience were more useful than the practices described in the financial management textbooks. This situation is consistent with RQ-1 where the participants showed limited understanding of the nature and types of their critical business decisions.

In substance, owners are responsible for the success or failure of their businesses. Managing a small business with limited financial resources, lack of time, lack of computer and business management skills, state regulations, and several other problems are generally considered the challenges of managing a small business. These challenges need to be overcome by the owners with their consistent pursuit for success and strong determination. The findings also suggest that the participants were facing lack of financial resources. There were strong indications that the owners were committed to acquire some resources which could assist them in organizing their business record, or hire professional services of professional personnel but financial constraints prevented them from acquiring such resources. It appears that the participants were unable to understand the significance and benefits of obtaining different business supporting resources while evaluating the costs of these resources.

*External barriers* such as economic conditions, state regulations, dependence on external accountants, and the financial market, are types of barriers that affect the productivity of small business sector. This also influences the decision making process that owners exercise
in normal business circumstances. In specific circumstances, owners are expected to make quick and accurate decisions to keep the business on track. Owners with financial skills and knowledge successfully adapt to new economic conditions, state regulations, and their relationship with external accountants. However, owners who lack financial literacy skills struggle for survival in the changing conditions. In the latter situation, particularly owners with no business experience, a newly started business and no assistance from external accountants, are exposed to a higher risk of failure than those who are already in the business.

In this study, some participants described how economic conditions influenced their financial success. They explained that when the market was positive their business was performing well, but when the market declined their business performance went down. The participants’ responses indicate that they were affected by the resulting effects of direct relationship between market performance and small business performance. Despite this finding most of the participants were not using external sources of finance to fund their businesses. Was the reason for not acquiring external finances based on owners’ personal choice to avoid accountability to external stakeholders (Chaganti, 2002), or had the owners’ encountered difficulties in obtaining external finances? The findings in this study suggest that the owners encountered both situations. The findings lead to the conclusion that participants desired an obligation-free full control of their business affairs. This gives the impression that the owners were inclined to stay away from their obligation to external stakeholders. From the external barrier point of view, it appears the participants had difficulty identifying their financial needs, and facing a state of indecision to determine the suitability of financial products that could match with their business needs. This finding is consistent with the findings of McMahon (2001) which suggests that the owners are restrained by external constraints to achieve the desired objective of business growth.
5.3.1 Suggested Intervention Strategies

Both internal and external barriers suggest a complicated situation which can be resolved by critically identifying and examining each barrier through conducting additional qualitative type of studies (Doern, 2009). There seems no short cut solution to these barriers. Internal barriers are particularly more context sensitive because they mostly stem from owners’ attitude.

Internal barriers relating to owners financial constraints can be overcome by providing owners with uncomplicated access to external finances through easy terms and conditions. A significant finding from the discussion is that accessing and using financial information in business decisions is entirely a dispositional factor of internal barriers. To overcome this barrier, private consulting firms need to be encouraged to offer different training opportunities to motivate owners to learn management, IT, and financial management skills. Identification of internal barriers, its nature, types, and extent of influence on business performance need to be initiated by conducting extensive studies.

External barriers are mostly considered beyond the owners control; however, efforts may be made to overcome some of these barriers by better business management skills and external assistance from public and private small business supporting organizations. Public organizations need to evolve delivery mechanism to deliver technical, legal and compliance related information at premises of owners.

5.4 Using an Accounting Information System

This section discusses the findings of RQ-3. This section has two parts. Section-5.4 discusses the use of an AIS, and related intervention strategies. Section-5.5 discusses the owners-
accountants relationship, and related intervention strategies. A discussion on the use of an AIS follows.

The findings suggest a very simplistic procedure is adopted for the collection and storage of accounting data. Most of the participants were not inclined to maintain a computerised accounting system to store data related to their business transactions. These findings are inconsistent with previous studies in other countries (Breen et al., 2003; Halabi et al., 2010; Marriot & Marriot, 2000). This question sought to understand whether the participants maintained any kind of accounting system either computerised or manual. The majority of participants realised that they were computer literate, yet few knew the potential benefits that can be achieved by a computerised accounting system. Participants’ lack of understanding of the importance of how financial information could be used in business decisions making was reflected in responses to the question on the uses and benefits of an accounting system for a small business. The owners’ lack of financial literacy was probably the most relevant response for not using a computerised accounting system (Dyt & Halabi, 2007; Halabi et al., 2010). Their lack of financial knowledge and skills prevented them from installing a computerised accounting system. If owners fail to understand the benefit, and contribution of financial information to the success of a business, how would they be able to install a computerised accounting system? Knowledge of financial skills is the prerequisite of recording, analysing, and interpreting information generated through a computerised accounting system (Collis & Jaris, 2002; MacMahon, 2001). Computer literacy and financial literacy are two different concepts. Financially skilled owners may understand the importance of a computer in managing their financial matters (Heenetigala & Armstrong, 2009), but computer literate owners who lack financial literacy may not be able to understand the financial information generated by a computer (Halabi et al., 2010).
Only three participants (25%) were using an AIS. This number of participants is quite low compared to a study conducted by Dyt and Halabi (2010) in Australia; Marriot and Marriot, (2000) in the UK; and Breen et al., (2003) also in Australia. In these overseas studies, most owners were using computerised accounting systems. Among the participants who were using computerised accounting systems, MYOB\(^1\) and Tally\(^2\) were the only two complete software packages being used by two participants. Participants who had business related academic qualifications and experience in accounting, were using the computerised accounting system very confidently. The findings also show that while some participants were keen to install computerised accounting systems this was prevented due to financial constraints. Besides, financial constraints and owners’ lack of financial literacy skills, another fact that may be linked to the non-adoption of computerised accounting system was the relative size of the business (Wolf & Pett, 2006). The findings show that most of the participants were managing their business alone, and employed only one full time employee. These factors appeared to be the some of the causes of avoiding the use of a computerised accounting system. Lack of financial resources, lack of financial literacy, and business size appeared to be the other main factors that prevented the use of computerised accounting systems in small businesses. These factors are consistent with the factors identified in other studies by (Halabi et al., 2010; Heenetigala & Armstrong, 2009).

5.4.1 Suggested Intervention Strategies

The absence of a proper accounting information system in small firms appears to be one of the main barriers preventing the owners’ access to financial information (Breen et al, 2004). The two main barriers to the implementation of a computerised accounting system include,

\(^1\) www.myob.co.nz
\(^2\) www.tallysolutions.com
owners’ lack of financial literacy skills to input data and interpret computer generated financial reports, and a lack of financial resources to purchase a computerised accounting system. These barriers may be overcome by adopting specific intervention strategies. The issue of financial constraints to purchase computerised accounting can be resolved by offering lower interest bearing loans by the banks, and IT consulting firms. As an intervention strategy, IT consulting firms, external accountants, and public/private small business supporting organizations can train and assist the owners to learn different aspects of a computerised accounting system. Perren and Grant (2000) found that providing training in different management skills help owners to confidently resolve management problems.

5.5 Owners-Accountants Relationship

The majority of the participants had no specific complaints about the services provided by their external accountants. Their satisfaction was based on reasonable fees, no problem in booking appointments, and the quality of advisory services. In the case of advisory services, GST was the foremost reason for hiring advisory services from external accountants and was followed by the supply of P/L and B/S. These findings are consistent with other studies explored by Halabi et al. (2010), Carey et al. (2005); Gooderham et al. (2004), and Breen et al. (2004). While GST and other tax matters appeared to be the primary reasons for hiring accountants, the hiring of accountants for the preparation of financial statements raises a couple of questions. Were the participants confident in their financial literacy and they needed financial reports to assist them in making business decisions? Or, was the preparation of financial reports just a co-incidental undertaking on the part of accountants? The findings support the latter situation. The findings show that most of the participants had a private limited company ownership structure, which required a complete record of business transactions for tax purposes. Hence the accountants were required to prepare financial reports for the preparation of GST and income tax returns, and they passed copies of these
financial reports to their clients after filing the GST and income tax returns. This suggests that the preparation of financial statements was a preliminary activity for the accountants, and there was no proof that in most of the cases the participants would have requested the accountants to prepare financial statements. The findings show that majority of the participants never requested their accountants to provide them financial statements because they were not using these statements to assist them in making business decisions. Only three participants acknowledged the assistance of their accountants for helping them using financial information to analyse their business performance. This finding is consistent with, Dyer and Ross (2007), and Jay and Schaper (2003). The finding is also consistent with the explanation given in RQ-1 where it was found that the participants were not using financial information in their critical business decisions. This suggests that the financial reports were mostly used for GST and tax calculations.

The findings suggest that the accountants were succeeded to impress their small clients by completing their taxation related obligations, and providing them annual financial reports. However, it appears that the accountants failed to judge whether the clients had proper financial skills to benefit from such reports by resolving their financial problems, and improving businesses performance. The findings further suggest that the participants knew the importance of financial reports and they were very satisfied that their accountants had provided them annual financial reports. However, they did not know what to do and how to use these reports. A clear information and expectation gap appeared to be existed between the participants and accountants. An information gap was existed in the sense that the accountants failed to inform the participants about the benefits of financial reports. An expectation gap was also existed between the participants and accountants because the participants wanted to understand the use of financial reports in business decisions but they were unable to
communicate it to their accountants. This finding is consistent with earlier studies by and Kirby and King, (1997), and Marriot and Marriot, (2000).

Price motivation was one of the main reasons for hiring an unqualified accountant instead of a qualified accountant. The findings show that the unqualified accountant was providing assistance in the preparation and submission of GST returns but not preparing regular financial reports; and the business performance measurement was based on a review of cheques butts and bank statements. Employing unqualified accountants is a common phenomenon in small and medium firms, but using full services of unqualified accountants depends on owners’ experience and knowledge in business and financial management. Besides, hiring an unqualified accountant also needs to be assessed to understand whether the price motivation can be compromised with the risk of lack of awareness of ethical and professional obligations associated with the hiring of an unqualified accountant.

5.5.1 Suggested Intervention Strategies

One major issue arises from the discussion on owners-accountants relationship. This relates to the participants’ inability to understand the financial reports that their accountants provided them. The external accountants were merely passing financial reports to their small clients without bothering to know whether the clients understood these reports. Gooderham et al. (2004) found that owners seek guidance from their external accountants for growth of their business operations. The accountants can meet the expectations of their clients by providing them financial information which can assist them to make better decisions and improve their business performance.

Parry (2010) suggests that the accountants need to prepare strategies which motivate the owners on maximum use of financial accounting practices in every business management
decision. This can be achieved by implementing different intervention strategies that create trust and confidence between the owners and their accountants. Kirby and King (1997) suggest that accountants can improve the provision of their advisory services through direct interaction with their small business clients by understanding the size and nature of their businesses, and the type of services they require. Marriot and Marriot (2000) suggest that the accountants should use better methods of explanation and interpretation of financial information to the owners. Halabi et al., (2010) suggests that the accountants should provide basic accounting analysis services to the owners at nominal cost.

5.6 Owners’ Financial Literacy

This section discusses findings relating to RQ-4 which sought to ascertain the level of the owners’ financial literacy and its relationship to the resolution of financial and managerial problems. This is followed by intervention strategies.

The findings suggest that most owners were confident on their knowledge and practices in dealing with the financial aspects of their business operations. Two tests were used to verify their contentions. The mode of measuring business performance, and use and interpretation of financial reports were considered the best tools to verify the participants’ claims.

From the evaluation of business performance perspective, all the participants were confident that they were using the appropriate measures and had the necessary skills to understand how their businesses were performing. The participants believed that cash in hand or cash at bank or cash equivalent factors such as accounts receivables and inventories were the primary measures to evaluate business performance. Other participants were comparing sale and expenses, and sales and purchases as a measure to understand the financial position of their
business operations. These findings are consistent with the findings of Halabi et al. (2010) in their study on Australian small businesses. Were these practices wrong or right for measuring the financial position of a small business? Before explaining whether the owners were measuring their business the wrong way or right way, it may be necessary to explore the view of extant literature on owners’ organizational practices. Ahrens and Chapman (2007), in their study on comparing accounting theories and individual organizational practices, found that organizational practices should be given preference over accounting theories if the latter proved to be more productive than the former, and accounting theories may be adjusted to accommodate such practices. Their findings were based on practice theory developed by Schatzki (2002), who suggested that practices emerge from an organization’s subsystem, and which reflect organizational members’ understandings on political, legal, economical, technological, social and cultural aspects. The finding in this study suggests that each participant was using different business performance measurement practices to evaluate the financial position of his or her business. This is consistent with Ahrens and Chapman (2007) findings in which they found that a performance measurement system was an important tool but it should be context specific i.e. different for each organization, and each manager. This necessitates the development of a paradigm to incorporate owners’ organizational practices into theories, or develop new practice-based theories. This suggests a new area of further research.

Another test for assessing owners’ financial literacy was based on ascertaining to what extent the participant were able to understand the financial reports, and were they using information from financial reports in making their business decisions. The findings were not found to be encouraging. Only three participants (25%) were found using financial reports and its main contents such as P/L, B/S, cash flow, tax, A/R, and A/P, for making business decisions. These
participants were those who had accounting or business related qualifications. This suggests the level of influence of business education and accounting experience on the attitude of small business owners to financial reporting. Disappointingly, most of the participants were not using traditional financial reports for decisions making. An apparent reason for not using financial reports in business decisions was the inability of participants to understand these reports. This finding is consistent with Halabi et al. (2010). The discussion in RQ-1 also found that although most of the participants had access to financial reports prepared by their accountants, they did not use this information in the management of their business operations. The participants were applying their personal practices for making business decisions instead of the information contained in financial reports. These practices were based on gathering financial information from reviewing cheque butts, bank statements, comparing invoices and receipts, and hand written diaries. Halabi et al. (2010), Jarvis et al. (1996), Deakins et al. (2002) and Dyt and Halabi, (2007), also found the same situation in their studies. Financial literacy in this perspective poses an unfavourable position of NZ small business owners. This finding is consistent with the most recent findings from a survey of small businesses in the Asia Pacific region conducted by CPA, Australia (2011). In this study NZ small business owners were found to be lacking in business and financial management skills.

5.6.1 Sources of Financial Literacy

Relevant to the question of owners’ financial literacy, another question was how owners acquired their financial literacy skills. The findings show that some owners were confident of their financial literacy skills because they had a business qualification and experience in accounting. The literature, however, takes a different view regarding owners’ formal business education. For instance, Handy et al (1987) considered that business education is clearly different from business management because, the former is a long term learning programme involving different subjects, whereas the latter is based on a mixture of experience, training
and education. This explanation is consistent with the finding of this study. Participants who were equipped with business related qualification and experience appeared to be confidently managing and organizing their business operations by applying financial information in making their business decisions. It appears that qualified and professionally experienced owners have higher chances of operating their businesses more effectively and economically than those owners who lack qualification and experience in business related fields. In practice, however, it is difficult to expect that all small business owners would have formal business education, and experience in business and accounting related fields. This then leads to another question: if only qualified and experienced owners can apply financial management effectively, then what is the contribution of financial management literature for unqualified and inexperienced small business owners? This is a possible area for further research.

5.6.2 Suggested Intervention Strategies

The finding on owners’ financial literacy skills indicates that the participants were over-confident on their level of financial skills. Frobes (2005) found that over-confident owners believe that their abilities and personal practices are better than others. The majority of the participants believed that they had appropriate levels of financial literacy and yet they were actually using cash and bank balances as the sources of evaluating business performance.

Boden, (1999); and Parry, (2010) suggest that owners who lack interest in the growth and success of their business operations and instead prefer to achieve goals to satisfy their personal lifestyle, need to be tackled with intervention strategies which do not clash with the owners specific behaviours. External accountants can devise intervention policies to provide financial information that the owners can easily understand and use to make business decisions. They also need to understand owners’ personal practices and techniques and
provide advisory services that do not conflict with owners’ attitude (Marriot and Marriot, 2000; Parry, 2010). In this regard, the role of public and private small business organization supporting organization is very important. Servon et al. (2010) found that public organizations can play a significant role in the development and success of small firms by establishing a close link with the owners. The findings suggest that the participants did not know who were the providers of supporting services and what kind of supporting were services available. Small business supporting organizations can improve the effectiveness of their services by prepare better intervention strategies in collaboration with small business owners.

5.7 Conclusion

The foregoing discussion suggests that most participants in the study were following individual organizational practices to manage and organize their small business operations. No evidence was found to confirm that most of the participants were using financial management practices as suggested in the financial management literature. Most of the participants were using different financial practices to operate and resolve business problems. Turning this discussion to the purpose of this study that intended to explore whether financial information were used in making organizational and managerial in a small business, the original understandings that were developed through empirical investigation was that NZ small business owners were more inclined towards and confident using personal financial practices rather than following the literature in three core areas: business organization, business management, and financial management. This may lead to the recognition of organizational practices. This is consistent with the Rae (2004) study in which he suggested recognition of organisational practices.
The intervention strategies described in this chapter indicate that there is a gap between the services offered by the NZ private and public small business supporting organizations, and the needs of owners. NZ owners are still in the process of improving their business management skills (Jayne, 2007), lack of financial management skills can greatly effect the survival of their business operations. Servon et al, (2010) found that through efficient and effective policy interventions, the government can play an important contribution to uplift growth and success rate in small firms. Intervention strategies initiated by the NZ government can assist the NZ small business owners to improve their skills, obtain external finances, and resolve their business and financial management problems. This can be achieved by establishing a close link between the NZ government and the owners.
Chapter 6: Conclusion

6.1 Introduction

This study has explored and identified issues related to the use of financial information in organizing and managing a small business in New Zealand. This chapter provides a summary of what has been explored and identified in this study. The chapter starts with a brief overview of literature review and research design, answers to the research questions, outlines the contributions of the study, identifies the limitations of the research undertaken and describes opportunities for further study.

Besides financial management, business organization and management has a key role in the success of a small business. The literature review explored the contribution of business organization, business management, and financial management in the success of a small business. The effects of financial information in making decisions regarding business operations and management issues were explored in-depth. The owners need to learn, understand, and apply basic business management skills to operate and manage their business operations effectively. This can be achieved when all management related decisions are supplemented with financial information. The use of financial information in decision making depends on the owners’ level of understanding of financial management skills.

Small business owners’ expertise in financial management practices assists them in understanding the financial aspects of their business operations (Collis & Jarvis, 2002). They access their financial information by an internally maintained computerised accounting system. A computerised accounting system, in small firms, assists owners by providing them timely and accurate financial information for making effective decisions (Marriot & Marriott, 2000). The owners who lack financial literacy skills hire the services of external accountants.
to assist them in filing their GST, tax obligations, and provide them financial information for making better business decisions (Gooderham et al., 2004). A misunderstanding sometimes disturbs the relationship between the owners and their accountants. This misunderstanding particularly arises from not delivering the services what the owners expect from their external accountants (Kirby & King, 1997). Owners with lack of financial management skills often struggle to plan and implement their critical business decisions, measure business performance, and effectively control their financial resources. The use of financial information in making managerial and business decisions thus depends on the owners’ level of financial literacy skills and their commitment to achieving financial goals.

Small business sector contributes to the economical and social development of any country. The level of this contribution depends on small business owners’ management and financial skills (Collis & Jarvis, 2002), and a state’s provision of supporting aids for the development of small business sector (Massey, 2003). Different public and private organizations provide assistance to NZ small business owners to boost the efficiencies of small business sector in New Zealand (Lewis et al, 2007). This study aimed to investigate the level of financial literacy of NZ owners. This was investigated from four different perspectives. These included the role of financial information in managing a small business, barriers to accessing financial information, the role of AIS in decision making and the nature of the relationship between the owners and accountants, and the level of owners’ financial literacy in organizing and managing a small business.

Different research methods were evaluated to develop the best research design to empirically examine the research questions in this study. A mixed method approach for collecting data through a questionnaire and semi-structured interview was considered appropriate for
empirical investigation. The qualitative approach was used for analysing the data collected and the drawing of empirical conclusions. Twelve participants were selected from the population of NZ small business owners. All the participants were operating their business in Auckland City.

6.2 Answers to the Research Questions

The findings show that most of the participants’ had annual turnover up to $300,000, and business experience from one to five years. This finding is not consistent with small business owners in Australia (Halabi et al., 2010). The private limited company type of ownership was found to be the most favoured type of ownership structure among the participants. Another significant finding was related to the needs of external funding for business growth. The findings show that majority of the participants did not acquire external finances for the start up or growth of their businesses. The survey by CPA Australia (2011) on Asia-Pacific Small Business indicates nil to four employees as the main reason for not acquiring external finances in NZ. This implies that the higher the number of employees in a business, greater the chances of business growth and higher the demand for external funding.

6.2.1 The Use of Financial Information in Decision Making

RQ-1 sought to understand the extent to which NZ small business owners use financial information in critical business decisions. The findings show that majority of participants did not use financial information in their critical business decisions. Buying and selling were the main critical business decisions for majority of the participants. The participants faced difficulty explaining their key business decisions. Each participant used different organizational practices for making their critical business decisions. Individual organizational practices involved owners’ personal experience, skills, and knowledge. Halabi et al. (2010),
in their study on Australian small business owners, also found similar findings. This was further confirmed in a recent Asia-Pacific Small Business survey by CPA, Australia (2011).

### 6.2.2 Barriers to Financial Information

RQ-2 identified the barriers that prevent NZ small business owners from accessing financial information. The findings show that there were both internal and external barriers. A Lack of managerial skills, financial constraints, unavailability of computerised accounting system, and lack of time for learning and training were the most common internal barriers impeding participants’ access to financial information. External barriers included the consequences of misunderstandings from owners-accountants’ relationship, lack of government assisted services, and market constraints. From the findings it appears that the participants were encountered with both types of barriers. Internal barriers were found to reflect the participants’ preference for managing business with personal life style by following different practices instead of pursuit for making financial progress, the external barriers were mostly indicating to unfavourable market, and lack of government assisted facilities. The influence of the owners’ personal techniques and practices on the management of their business operation is consistent with the findings of Walker and Brown (2004).

Internal barriers can only be resolved either by creating a change in owners’ behaviour, or developing special skills and techniques compatible to owners’ attitude. External barriers can be overcome by government facilitations.

### 6.2.3 Use of Accounting Information System

RQ-3 comprised two parts. The first sought to understand what methods of collecting, recording, analysing and interpreting accounting data were used in NZ small business sector. The findings show that most of the participants were not using a computerised accounting
Though the majority of the participants acknowledged that they were computer literate, low level of financial literacy skills, financial constraints, and lack of interest were factors impeding the adoption of a computerised accounting system. The majority of the participants were using different manual methods of recording business data, including reviewing cheque butts and bank statements, writing diaries, and reviewing receipts/payments books. Most of the owners were seemed not inclined to adopt a computerised accounting system. These findings were not consistent with NZ small business owners’ counterparts in Australia where most of the small business owners used a computerised AIS (Breen et al., 2003; Halabi et al., 2010). The data analysis showed that a major reason for not adopting AIS in NZ small firms relates to the financial constraints and the owners, low level of financial skills.

### 6.2.4 Owners-Accountants Relationship

Part two of RQ-3 sought to understand the nature of relationship between the NZ small business owners and their external accountants. The findings indicate that NZ small business owners were satisfied with the services the external accountants were providing. A major reason for hiring external accountants was found to be the GST and tax related obligations, and providing them financial reports. This finding is consistent with the study by Halabit et al (2010). A major reason for not hiring accountants was that the owners were qualified in some business related education and had experience in accounting.

From the in-depth data analysis of owners-accountants relationship, it appears that the accountants were not providing the quality of services that could assist the participants to understand their financial position of their businesses. The findings show that the accountants were providing financial reports to their small clients without bothering to know whether or not the clients needed them. Additionally, the accountants were not assisting the owners to
understand the effects of financial reports on business growth, and resolving business problems. This finding is consistent with the findings of studies conducted in other countries, e.g., in the UK (Marriot & Marriot, 2000), and in Australia (Halabit et al., 2010).

6.2.5 Owners Financial Literacy

RQ-4 sought to understand the level of financial literacy of NZ small business owners. The findings show that majority of the participants were confident in the methods they used for measuring and understanding business performance. From the analysis, it appears that the NZ owners tend to apply their experience-based practices to measure their business performance instead of applying financial management practices. A major cause of this phenomenon was a lack of familiarity and understanding of financial reports and its contribution to measuring the business performance and decisions making. This finding is consistent with studies by Dyt and Halabi (2007) and Halabi et al. (2010). The participants believed that their experience developed by trial and error, daily learning, and committing mistakes, was better than using P/L, B/S, cash flow statements, and ratio analysis for operating the business successfully. Comparing sales and purchases, income and expenses, cash and cash equivalent assets, and bank statements, were found to be the measures that participants used for measuring business performance, and making business decisions. The use of diverse organizational practices for measuring business performance and making business decisions indicates that the participants were satisfied with the benefits of these practices. This raises the question that if the owners’ organizational practices assist them better, then should they be blamed for not using the prevailing financial management practices? Rae (2004) resolved this question by emphasising the need for developing new practice-based theories to accommodate the best organizational practices.
6.3 Contribution

The contribution of any research is judged from its theoretical and practical benefits, and resulting effects on the communities. The objective of this study was to investigate whether NZ small business owners use financial information in business decisions making. This objective was empirically tested and results were drawn. The analysis of these results reveals some significant characteristics of NZ small business owners. Each characteristic contributes to existing literature by adding new aspects of small business organization and management. The contribution of these characteristics can explained in five distinct ways.

1. From the findings, it is confirmed that NZ small business owners applied a diverse range of organizational practices for measuring business performance, and making business decisions. Earlier studies have investigated how financial reports and other financial management practices assist owners in decisions making. This study discovered that the NZ owners have more confidence in their experiences than the prevailing financial management practices and methods described in the extant literature.

2. Earlier studies have investigated different factors that cause barriers in the collection and processing of financial information. This study identified two types of barriers encountered by NZ small business owners when collecting and processing financial information for making effective business decisions. These barriers were identified as internal and external barriers. Placing these barriers in two different categories can assist in investigating the barriers in more detail and suggesting possible solutions.

3. Identifying and planning key business decisions are considered a prerequisite to successfully managing a small business. The findings in this study confirm that the
NZ small business owners’ were facing difficulties in identifying, planning, and implementing their key business decisions. This characteristic of the NZ small business owners can be considered one of the main reasons for slow business growth and a greater risk to the survival of a small business.

4. The literature generally considers financial constraints and owners’ lack of computer literacy as the main reasons for not installing a computerised accounting system in a small business. Besides these reasons, this study identified another major reason for not installing a computerised accounting system. This study confirmed that the major reason for not installing a computerised accounting system was based on NZ owners’ lack of confidence on their financial skills. They believed that they would not be able to operate a computerised accounting system without financial management skills.

5. From the owners-accountants relationship perspective, this study revealed that the NZ small business owners were receiving financial reports from their accountants without knowing how these reports could assist them, what were their benefits, and why the accountants were providing these reports. The accountants were just delivering these reports to their small business clients without bothering to know whether or not the clients were aware of the benefits of these reports.

6.4 Significance
In NZ, the small business sector is the largest revenue generating sector and providing employment to the largest segment of NZ population. The significance of this study is in developing an understanding of the importance of using financial information in business decisions making. The empirical findings drawn in this study can be significant for four categories of people: the NZ small business owners, the external accountants, the NZ public
and private organizations which provide support to the small business sector, and the researchers.

1. For NZ small business owners, this study provides an opportunity to compare their existing experience-based practices with the findings of this study. The comparison process will assist them to understand their key areas of concerns, and accordingly they may change their attitude and management style to prevent the likelihood of any financial loss to their business operations.

2. For external accountants, the findings of this study specifically indicate that the owners need more valuable information that assist them in resolving their financial problems, and grow their firms. As most small business owners hire advisory services from second and third-tier accounting firms, the finding from this study provides a good opportunity to the accountants to satisfy the concerns of their small business clients. Consultants other than accounting firms, particularly information technology providers, can also benefit from the findings by improving their advisory services that could meet the information requirements of small business owners.

3. For NZ public and private organizations that provide support to small business sector, they can compare their existing services with the findings in this study. The comparison will provide assistance to find whether the existing facilitations of these organizations satisfy the needs of NZ small business owners. This may further assist the organizers of these organizations to improve their services and supporting products. This may enable the owners to access and avail the benefits through these organizations.

97
4. For researchers, there are several opportunities to conduct research in other areas that emerged as a result of this research. Conducting research in areas as suggested in this study will contribute to develop an improved understanding of the context of NZ small business owners. Further, the finding of this study may be replicated by conducting a quantitative study, or by a qualitative approach with a larger sample.

6.5 Implications

The practical implications of this study can be understood by its contribution to affecting the behaviour of small business owners and its effects on accountants’ services. The owners’ behaviour is central to the success and failure of a small business sector. This study theoretically explained, empirically tested, and concluded that each participant was following different practices to organize and manage their business operations. While the resulting findings are not totally consistent with the extant literature on financial management, it can be implied that the owners can enhance their skills by training, or by seeking assistance from external accountants. This can be achieved by motivating owners to bring a change in their attitude. Motivating owners to concentrate more on identifying and understanding their critical business decisions can be the first step in changing owners’ attitude. Without developing an understanding as to what makes the critical decisions and how these decisions can be supplemented with financial information, objective of the best business management cannot be achieved. Similarly, not realizing the need to implement a computerised accounting system to accommodate the growing needs of processing accounting data can ultimately affect the owners’ and management of the business. Installing an appropriate computerised accounting system thus depends on owners’ business management skills and their perceptions regarding business innovations and automations.
Hiring the services of external accountants for compliance and advisory related services is a common practice for owners who lacks financial literacy skills, or busy with their business operations. The relationship between the owner and accountants can be strengthened by trust and confidence. The implications of this study for external accountants are twofold. First, the study alerts the accounting profession of possible polarization if the accountants fail to provide the quality and nature of services that the small business owners expect from them. Second, the study provides an opportunity for accountants to investigate and improve their services in the areas of deficiencies identified in this study.

6.6 Limitations and Areas of Further Research

This section outlines the limitations of the research undertaken and the consequences of these limitations on the conclusions that may be drawn from the findings. In addition, opportunities for further investigation are identified.

The limited number of participants in qualitative studies often raises the question of generalizability. However, Popay and William et al. (1998) in their study suggest that the aim of generalizability in qualitative studies is to develop theoretical understanding of a phenomenon that can be applied to a similar population. A larger sample can be used in future studies to achieve the objective of generalizability. Another limitation relates to the gender of the participants. All participants in this study were adult males operating business in Auckland city. Female small business owners might be managing and organizing business with different styles, strategies and skills than the male owners. This can be another area of further research to examine the situation of financial literacy, and using financial information in organizing and managing a small business by NZ female small business owners, and then compare the results with NZ male small business owners. As New Zealand is a multi-cultural nation, participants in this study come from different ethnic groups. Owners from diverse
cultural groups might have different behavioural and leadership characteristics than those participated in this study. This could possibly be an area of new research to examine the situation of specific ethnic group or groups. Moreover, the study is basically conducted on small firms operating in Auckland City. The situation of owners operating small firms in rural Auckland can be examined in other studies.

The scope of this study was limited. Only basic concepts of business organization and business management were examined in this study. Similarly, the concept of financial management was examined in a limited capacity. It was used to project its importance and contribution in the management of a small business. As such business organization, business management, and financial management are very broad subjects, which cannot be covered in detail in a micro type of research project.

The study points to some interesting areas of further research; particularly, the role of owners’ organizational practices in areas of measuring business performance, and the type of financial information they use in decision making, can be the two significant topics of further research. Another area of further research to focus on relates to two groups of small business owners i.e. retailers/wholesalers and services providers. As the characteristic of both types of businesses are different, a new research may be initiated to explore how each group determines, accesses, and decides their financial information needs for better business decisions. Yet, another area of further research could be the area of industry specific research such as transportation, medicines, food, beverages. In the area of owners-accountants relationship, a detail study might be conducted to explore why accountants provide their small clients financial reports which they do not understand.
6.7 Conclusion

This study investigated whether small business owners in NZ use financial information in their business management decisions, how they use this information, and what types of difficulties they face in obtaining this information. The study was conducted knowing that financial management provides significant assistance in managing a business effectively and successfully. The findings from this study concluded that NZ small business owners mostly use their experience-based practices for making business decisions rather than using the practices prescribed in the financial management literature.
APPENDIX 1:

Questionnaire

Please Note: Participation in this project is voluntary and, participants are free to decline to answer any question.

I. Business Information

Please tick the box that closely matches your choice

1. When did you establish your business
   □ 1 to 5 years ago
   □ 6 to 10 years ago
   □ 11 to 15 years ago
   □ 16 or more years ago

2. What were your total sales last year?
   □ Up to $300,000
   □ $300,000 to $600,000
   □ $600,000 to $900,000
   □ $900,000 and above

3. How many full-time equivalent staff are employed in your business?
   ______________________________________________________

4. What is the ownership structure of your business?
   □ Sole proprietorship
   □ Partnership
   □ A private Limited Company

5. How did you finance your business?
   □ Personal funds
   □ Loan from bank
   □ Both personal funds and loan from bank

6. Who manages your business?
   □ Owner
   □ A professional Manager
   □ Both owner and professional manager
   □ Remarks: ______________________________

7. What is the nature of your business?
   □ Retail
   □ Wholesale
   □ Providing services

102
II. Owners-accountants’ relationship

1. Have you engaged any external accountant for your business?
   □ Yes
   □ No

2. What were your main priorities for engaging an external accountant?
   □ Tax matters
   □ Profit and Loss
   □ Balance Sheet
   □ Cash flow statement
   □ Ratio Analysis
   □ Budgets
   □ Forecasts
   □ Other ___________________

3. How long have you been with your current external accountant?
   ____________ (Years)

4. Are you satisfied with your current external accountant?
   □ Yes
   □ No
   If no why? ________________________________

III. Accounting Information Use

1. Would you regard yourself as computer literate?
   □ Yes
   □ No

2. Do you maintain computerised accounting records for your business?
   □ Yes
   □ No

3. How do you maintain accounting records for cash receipts?
   □ Cash Register
   □ Cash Book
   □ Accounting software
   □ Other ________________________________
4. How do you maintain accounting records for cash payments?

☐ Cash Register
☐ Cash Book
☐ Accounting software
☐ Other ________________________________

5. What kind of accounting software do you use for managing financial information?

☐ Xero
☐ Quick-Books
☐ MYOB
☐ MYOB Live
☐ Other: ________________________________

6. What kind of financial reports do you mostly generate with your accounting software?

☐ Profit and Loss
☐ Balance Sheet
☐ Cash Flow statement
☐ Ratio Analysis
☐ Accounts Receivable
☐ Accounts Payable

IV. Owners’ Financial literacy/awareness

1. Are you happy with the financial performance of your business?

☐ Yes
☐ No
☐ Not aware
☐

2. Please identify whether the following financial information assists you in decision making?

<table>
<thead>
<tr>
<th>Financial Information</th>
<th>Not Useful</th>
<th>Useful</th>
<th>Very Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit and Loss account</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Balance sheet</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Cash Flow Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Any other information:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. How frequently are financial information/reports prepared for your business?

☐ Weekly
☐ Monthly
☐ Quarterly
☐ Biannual
☐ Annual
APPENDIX 2:

Semi-structured Interview

Standard Questions

I. Owners-accountants’ relationship

1. What were the main reasons that led you to engage an external accountant?
2. Does your accountant help you understand the implication of financial information they prepare for you?
3. Have you ever changed your accountant? If so WHY?

II Accounting Information Systems use

1. What do you think are the benefits of having a computerised accounting system?
2. Did you encounter difficulties in implementing a computerised accounting system?

III. Owners’ Financial literacy/awareness

1. Do you consider your financial skills to be good/bad or indifferent?
2. How did you acquire your financial literacy skill?
3. How do you know whether your business is performing well or bad?
4. Do you understand the financial information that your accountant prepares?
   If Yes: What do you understand the most?
   If No: What sort of information would you like?
5. What are your critical business decisions?
6. Do you receive any accounting information that assists you in making these business decisions?
Appendix 3:

Participant Information Sheet

Date Information Sheet Produced:
10 August 2011

Project Title: The Impact of Financial Information on Organizing and Managing a Small Business

An Invitation

You are invited to participate in a research project which is studying the impact of financial information on organizing and managing small business in New Zealand. The study seeks to identify what financial information helps NZ small business owners in decision making, and what prevent them from accessing this information. It is being undertaken by Rab Nawaz, a Master of Business student from the Faculty of Business. Participation in the project will involve the completion of a short questionnaire and participation in a 20-30 minute interview. Participation in this project is totally voluntary and participants may withdraw from the study at any time.

What is the purpose of this research?

I am undertaking this research project for my Master of Business studies at the Auckland University of Technology, and I hope to publish the findings in professional and academic journals.

What will happen in this research?

Participants will sign participation Consent Form, complete a short questionnaire and take part in an interview at a time and place convenient to them.

What are the discomforts and risks?

The questionnaire and interview questions seek to ascertain how financial information assists in planning and decision making. There may be questions which are perceived to require the release of commercially sensitive information.
How will these discomforts and risks be alleviated?
In a situation where the participants feel any kind of discomfort whether to reply or not to a question, the participant may simply request to skip that question, or provide restricted form of response which does not conflict with their concerns.

What are the benefits?
Participating in the research will create an opportunity for the participant to understand the importance of small business owners' financial literacy in making better decisions for resolving financial problems and improving their business performance. The research will also enable the researcher to complete his Master of Business qualification.

How will my privacy be protected?
Your name, business details and all other information that you supply for this research shall be fully protected. Only first names will be used to link questionnaire responses to interview questions for data analysis. No identifying data will be used in the write up of the results.

What are the costs of participating in this research?
Participation in this research involves no monetary costs. The completion of a questionnaire and taking part in the interview require only 35 to 45 minutes.

What opportunity do I have to consider this invitation?
You are requested to consider and respond to this invitation within the next three days.

How do I agree to participate in this research?
If you are willing to participate in this research project, please sign the attached consent form.

Will I receive feedback on the results of this research?
Feedback on the results will not be immediately available because the research project has many phases to complete. Copy of the results will be made available if requested.

What do I do if I have concerns about this research?
Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor.

Name: Dr. Paul Wells
Email: paul.wells@aut.ac.nz
Phone No. 921 9999 ext. 5750

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, madeline.banda@aut.ac.nz, 921 9999 ext 8044.
Whom do I contact for further information about this research?

Researcher Contact Details:
Name: Rab Nawaz  
Email: pokhtoon33@yahoo.com  
Phone: 021 02960243

Project Supervisor Contact Details:
Name: Dr. Paul Wells  
Email: paul.wells@aut.ac.nz  
Phone No. 921 9999 ext. 5750

Approved by the Auckland University of Technology Ethics Committee on 12 August AUTEC Reference number 11/178.
Consent Form

Project title: The Impact of Financial Information on Organizing and Managing a Small Business

Project Supervisor: Dr. Paul Wells
Researcher: Rab Nawaz

☐ I have read and understood the information provided about this research project in the Information Sheet dated 12 August 2011.

☐ I have had an opportunity to ask questions and to have them answered.

☐ I understand that a questionnaire will be completed, and notes will be taken during the interviews and that they will also be audio-taped and transcribed.

☐ I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.

☐ If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.

☐ I agree to take part in this research.

☐ I wish to receive a copy of the report from the research (please tick one): Yes ☐ No ☐

Participant’s signature: ............................................................................................................................

Participant’s name: ....................................................................................................................................

Participant’s Contact Details (if applicable)
............................................................................................................................................................
............................................................................................................................................................
............................................................................................................................................................

Date ____________________________
APPENDIX 5:

Confidentiality Agreement

Project title: The Impact of Financial Information on Organizing and Managing a Small Business

Project Supervisor: Dr. Paul Wells
Researcher: Rab Nawaz

☐ I understand that all the material I will be asked to transcribe is confidential.
☐ I understand that the contents of the tapes or recordings can only be discussed with the researchers.
☐ I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber’s signature: ____________________________
Transcriber’s name: ________________________________
Transcriber’s Contact Details (if appropriate):
   Email: ________________________________________
   Phone: 09 634-1232
   Mobile: 021-959-075

Date: 08 September 2011

Project Supervisor’s Contact Details (if appropriate):
Dr. Paul Wells
paulwells@aut.ac.nz
Phone: (09) 921 9099 5768

Approved by the Auckland University of Technology Ethics Committee on 12 August 2011 AUTEC Reference number 11/178

This version was last edited on 13 October 2019
APPENDIX 6:

MEMORANDUM
Auckland University of Technology Ethics Committee (AUTEC)

To: Paul Wells
From: Dr Rosemary Godbold Executive Secretary, AUTEC
Date: 12 August 2011
Subject: Ethics Application Number 11/178 The impact of financial information on organizing and managing a small business.

Dear Paul

Thank you for providing written evidence as requested. I am pleased to advise that it satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC) at their meeting on 11 July 2011 and I have approved your ethics application. This delegated approval is made in accordance with section 5.3.2.3 of AUTEC’s Applying for Ethics Approval: Guidelines and Procedures and is subject to endorsement at AUTEC’s meeting on 12 September 2011.

Your ethics application is approved for a period of three years until 12 August 2014.

I advise that as part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through http://www.aut.ac.nz/research/research-ethics/ethics. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 12 August 2014;
- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/research/research-ethics/ethics. This report is to be submitted either when the approval expires on 12 August 2014 or on completion of the project, whichever comes sooner;

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are reminded that, as applicant, you are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

Please note that AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to make the arrangements necessary to obtain this.

When communicating with us about this application, we ask that you use the application number and study title to enable us to provide you with prompt service. Should you have any further enquiries regarding this matter, you are welcome to contact Charles Grinter, Ethics Coordinator, by email at ethics@aut.ac.nz or by telephone on 921 9999 at extension 8860.
On behalf of AUTEC and myself, I wish you success with your research and look forward to reading about it in your reports.

Yours sincerely

Dr Rosemary Godbold
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Rab Nawaz pokhtoon33@yahoo.com
REFERENCES


115


