
Research Proposal

By:
Mohd Ridzuan Darun
Student ID: 1075703
Accounting Group
Commerce Division
Lincoln University

Supervisor:
Dr. Jamal Roudaki
Senior Lecturer

Associate Supervisor:
Jack Radford
Senior Lecturer

25th August 2008
Abstract

Purpose – This study investigates the practice of Working Capital Management (WCM) in the Malaysian context, particularly in Malaysian listed companies. Even though a number of studies about WCM were undertaken in many countries around the world, especially in Western countries, the understanding about how to manage working capital is not explicit. To date there has been no study examining the Malaysian context. Prior research in this area has focused on two approaches 1) surveys seeking to examine the relationship between WCM and corporate performance, and 2) the development of optimisation models to improve WCM performance. In the event of changes in industry context, it is argued that the failure of WCM research to reflect the characteristics and challenges of contemporary organizational settings has led to a loss of relevance and gives rise to the need for a conceptual framework explaining current WCM practices. This study is intended to first develop an understanding of the determinants of the various WCM practices currently used in organizations; and secondly to develop a conceptual framework explaining the dynamics of WCM in Malaysian context.

Design/methodology/approach – This research will use multiple case studies, with participating organizations selected from the main board at the Bursa Malaysia. Key informants will be chosen to ensure that the collection of data illustrates the patterns of WCM practices in organizational settings. The research questions are designed to explore the diversity of decision-making processes related to WCM practices. This study will use semi-structured interviews, and secondary evidence to interpret WCM practices. Qualitative data analysis will be used to analyze the evidence.

Limitations and Delimitation – The main limitations of this study will be the constraints due to limited time and financial support. The researcher is required to allocate a long period of time on actual sites to investigate and understand the WCM practices. However, a coherent system in collecting and analyzing data should minimize the risks of research process.

Significant of Study – This study will contribute to the body of knowledge by identifying how Malaysian companies manage their working capital. This study will provide a general framework to researchers, policy makers, professionals and managers to guide future researches, reappraise current business practices, and provide basic guidelines for policy makers in rapid changing of business environment of Malaysia.

Keywords – Working Capital Management, Management Accounting Change, Corporate Practice, Corporate Performance.
# Table of Contents

Abstract .................................................................................................................. ii

Table of Contents .................................................................................................. iii

List of appendices .................................................................................................. iii

1. Introduction..........................................................................................................1
2. Research Questions..............................................................................................3
3. The Significance of this Study............................................................................4
4. Literature Review ...............................................................................................4
5. Research Methodology – Qualitative Study .....................................................9
   5.1 Multiple Case Studies....................................................................................10
   5.2 Research Sequence.......................................................................................11
   5.3 Case Selection...............................................................................................13
   5.4 Collecting Evidence......................................................................................14
   5.5 Data Analysis...............................................................................................17
6. Limitations and Delimitations ..........................................................................19

References.............................................................................................................20

# List of appendices

Appendix 1: Research Schedule ...........................................................................24

1. Introduction

The significant decline of corporate performance during the late 1990s financial crisis saw corporations in South East Asia, including Malaysia, paying more attention to Working Capital Management (WCM) (Claessens, Djankov, & Xu, 2000). For example, Telekom Malaysia’s, one the largest listed companies in Malaysia, main concern is to improve WCM due to customers’ slow payments after the financial crisis and rival companies offering competitive rates have made cash collection even more difficult (Crane, 2001). According to a survey by REL Consultancy Group, Asian companies including those in Malaysia are gradually improving their WCM performance, but still have long way to go to equal the WCM performance of other multi-national corporations (Bacani, 2007). Even though a number of studies about WCM were undertaken in the countries around the world, especially in Western countries, the understanding about how to manage working capital in Malaysian context, particularly Malaysian listed companies, is not explicit.

Improving WCM is reasonably important for companies to withstand the impacts of economic turbulence (Reason, 2008). Alternatively, efficient WCM is also essential for companies during the booming economic periods (Lo, 2005), for the reason that WCM is related to all aspect of managing current assets and current liabilities (Emery, Finnerty, & Stowe, 2004; Hampton & Wagner, 1989; Hill & Sartoris, 1992; Scherr, 1989; Vander Weide & Maier, 1985). WCM is not only to immunise corporations from financial upheaval but can be managed strategically to improve competitive position and profitability. The wider perspectives of WCM contribute to the greater opportunities to create wealth. Increasing the speed of a cash
cycle through receivable and payable management helps generating more profitability and liquidity (Johnson & Soenen, 2003). Further, effective inventory management is also critical to the management of liquidity and profitability in many companies.

Investigating the determinants of WCM in an organizational setting provides valuable information that can be used in formulating an effective WCM strategy. To date much of WCM research is dominated by either positivist (Anand & Gupta, 2001; Filbeck, Krueger, & Preece, 2007; Filbeck & Krueger, 2005; Garcia-Teruel & Martinez-Solano, 2007; Lazaridis & Tryfonidis, 2006) or normative (Baker & Damon, 1977; Crum, Klingman, & Tavis, 1983; Damon & Schramm, 1972; DeLorenzo, 2002; Loeser, 1988; Maness, 1994; Richards & Laughlin, 1980; Sartoris, Hill, & Kallberg, 1983; Shulman & Cox, 1985; Wadhwa, Kanda, Bhoon, & Bibhushan, 2006) studies focusing on the relationship between corporate performance and WCM.

The individual components of WCM -- cash, receivables, payables, and inventory management -- influence the WCM performance in different manners (Schilling, 1996). In addition, the decisions made in any one WCM components have an impact on the other WCM components (Sartoris et al., 1983). Since a WCM involves the full range of business processes, meaning effective WCM should be integrated along the processes in order to maximize organizational performance (Crum et al., 1983; Damon & Schramm, 1972). In this regard, a study in New Zealand by McInness (2000) showed that 94% of companies did not integrate their WCM components as proposed by the theory. Practitioners feel that sophisticated financial decision-making techniques are not practical as they contain unrealistic assumptions, cannot be explained to top management, and are difficult to implement (Trahan & Gitman, 1995).
However, these studies fail to explain the dynamics of WCM from actual organizational settings. Therefore this study addresses (i) who is involved with working capital decision-making, and (ii) how managers make decisions and organise working capital processes.

The development of a theory about as well as interpreting the practice of WCM should be cognisant of the surrounding organizational environment. Further, theory and practice exist in a reciprocal relationship. While theory can be used to guide practice, theory itself should be developed from an interpretation of practice. It is argued that the failure of WCM research to reflect the characteristics and challenges of contemporary organizational settings has led to a loss of relevance and gives rise to the need for a conceptual framework explaining current WCM practices. The first step to narrow this gap is to understand the WCM practices in actual organizational settings, particularly in Malaysian listed companies. The second step is to develop conceptual framework explaining the determinants of WCM practices thus providing a guide in formulating effective WCM strategies in Malaysian context.

Therefore this study is intended to:

- Develop an understanding the determinants of the various WCM practices currently used in Malaysian listed companies
- Develop a WCM conceptual framework explaining the dynamics of WCM of Malaysian listed companies.

2. Research Questions

The primary research question is: How is working capital managed in Malaysian Listed Companies’ context? Two secondary questions are designed to answer this primary question.
2.1 First, to develop an understanding of the determinants of various WCM practices currently used in Malaysian listed companies: Do managers of Malaysian listed companies integrate WCM components in their decision-making processes?

2.2 Second, to develop a WCM conceptual framework explaining the dynamics of WCM of Malaysian listed companies: How do internal and external factors affect the WCM?

3. The Significance of this Study

The purpose of a conceptual framework is to explain the determinants of WCM practices thus providing a guide in formulating effective WCM strategies in Malaysian context. In addition, this study will contribute to the body of knowledge by identifying how Malaysian listed companies manage their working capital in local setting. By developing a conceptual framework, this study will provide a general WCM framework for researchers, policy makers, professionals and managers to guide future research, reappraise current business practices, and provide basic guidelines for new policies in dynamic business environments.

4. Literature Review

An extensive literature review conducted to identify the direction of this study, the WCM literature explains the basic purposes of WCM components and the integration of WCM components in decision making processes. Furthermore, the WCM literature illustrates internal and external factors that influence the WCM performance.

4.1 WCM Components
WCM processes involve crucial decisions on multiple aspects, including the investment of available cash, maintaining a certain level of inventories, managing account receivables, and account payables. However, WCM is not limited to these tasks, but is implicated in multiple levels of interactions both internally and between external parties (suppliers, customers, distributors, bankers and retailers). For example credit officers are required to investigate credit history of their clients in order to understand their financial worthiness. Furthermore, WCM can be narrowed to four important components -- cash, receivables, inventory, and payables management -- which will be briefly explained in this section.

The purpose of cash management is to determine the optimal level of cash needed for operation and invested in marketable securities, which suitable for the nature of business operation cycle (Emery et al., 2004; Gitman, 2009; Scherr, 1989). The challenge of cash management is to balance the appropriate level of cash and marketable securities that reduce the risk of insufficient fund for operation and opportunity cost of holding excessively high level of these resources. Thus, a company’s competency to synchronize cash inflows with cash outflow, by using cash budgeting and forecasting in formulating a cash management strategy is important.

Inventory plays an important role to determine the activities in producing, marketing, and purchasing. Since inventory determines the level of activities in a company, managing it strategically contributes to profitability (Hill & Sartoris, 1992). Supplier selection process and inventory management are reciprocal to enable companies to deal with uncertainties of consumer demand. Furthermore, a company’s ability to respond to demand is largely dependent on how efficient the company manages inventories and how committed its suppliers are to support a company’s production lines.
Accounts payable are one of the major sources of unsecured short-term financing (Gitman, 2009; Hill & Sartoris, 1992). Utilising the value of relationship with payee is a sound objective that should be highlighted as important as having the optimal level of inventories (Hill & Sartoris, 1992). As a consequence, strong alliance between company and its suppliers will strategically improve production lines and strengthen credit record for future expansion.

Profit may only be called real profit after the receivables are turned into cash. The management of accounts receivable is largely influenced by the credit policy and collection procedure. A credit policy specifies requirements to value the worthiness of customers and a collection procedure provides guidelines to collect unpaid invoices that will reduce delays in outstanding receivables (Hill & Sartoris, 1992; Richards & Laughlin, 1980). Aligning the receivable management between cash, inventory and payable management is relatively challenging and important, and a stimulus to researchers’ studies to integrate the WCM components.

4.2 Integration of WCM Processes

For the past 35 years, WCM research has developed various approaches to integrate the WCM components. The integration of the WCM components in decision making is considered as mainstream research. According to Table 1, research in the integration of WCM can be divided into three categories, integration between receivables and inventory, integration between inventory and payable, and integration of all the WCM components.

The correlation of WCM components means that the decisions made in any one component will impact on other units within the organization (Sartoris et al., 1983). For example, the inventory manager’s decision on the level of raw materials, if the amount of inventory is excessively high, other WCM components (receivables
& payables) will share the risk and should react to reduce the volume of finish goods in order to stretch the profit margin. As a consequence, ineffective inventory management will have an impact on company’s profitability, by holding cost and risk of unsaleable products.

Table 1: The Integration of WCM

<table>
<thead>
<tr>
<th>Research Categories</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrate Receivables and Inventory</td>
<td>(William Beranek, 1963); (Shapiro, 1973); (Bierman, Chopra, &amp; Thomas, 1975); (Sartoris et al., 1983)</td>
</tr>
<tr>
<td>Integrate Inventory and Payable</td>
<td>(G. Hadley, 1964); (William Beranek, 1967); (Haley &amp; Higgins, 1973)</td>
</tr>
<tr>
<td>Integrate of all WCM components</td>
<td>(Damon &amp; Schramm, 1972); (Baker &amp; Damon, 1977); (Crum et al., 1983); (Thompson, 1986) (Kim &amp; Chung, 1990)</td>
</tr>
</tbody>
</table>

Since the WCM components are correlated, to integrate the decision making process between business units is an ideal solution to manage the WCM. However, a study about WCM integration in New Zealand (McInnes, 2000) showed that 94% of companies did not integrate their WCM components as proposed by the theory. Unfortunately, WCM literature lacks explanations of why and how managers integrate or disintegrate the WCM components. Hence, to extend the understanding about the causes, behaviours, and affect of WCM integration, this study will seek explanations from the managers why and how their companies integrate the WCM decision making process, whereas some companies did not.

4.3 Factors Influencing WCM

The management of working capital is influenced by external and internal factors (Table 2). While external macro-factors are affecting all companies, regardless industry, only companies within a particular industry are affected from external micro-factors. However, both opportunities and threats can arise from any of them. At an organization level, a set of internal factors impacts on all processes and activities,
including WCM, but in different manners according to the direction and relationship between them. Consequently an ability to interpret and respond to the changes in these environmental variables is critical (Johnson & Soenen, 2003), the managers who involving in WCM.

Table 2: The Internal and External Factors that Affect WCM

<table>
<thead>
<tr>
<th>1. External Factors</th>
<th>What may affect WCM</th>
<th>References:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Macro level factors</td>
<td>i. Politics</td>
<td>(Ketchum, 1942), (Ketchum, 1943), (Carey, 1949), (Carey, 1949)</td>
</tr>
<tr>
<td>b. Micro level factors</td>
<td>i. Politics</td>
<td>(Ketchum, 1942), (Ketchum, 1943), (Carey, 1949), (Carey, 1949)</td>
</tr>
<tr>
<td></td>
<td>ii. Business and economic environment</td>
<td>(Herbst, 1974), (Ben-Horim &amp; Levy, 1983)</td>
</tr>
<tr>
<td></td>
<td>iii. Between Industries effect</td>
<td>(Hawawini, Viallet, &amp; Vora, 1986)</td>
</tr>
<tr>
<td></td>
<td>iv. Legislation</td>
<td>(Peel, Wilson, &amp; Howorth, 2000)</td>
</tr>
<tr>
<td></td>
<td>i. Customer needs/requirements</td>
<td>(Bielenberg, 1992), (Reyman, 2005)</td>
</tr>
<tr>
<td></td>
<td>ii. Financing requirements/methods</td>
<td>(Holdren &amp; Hollingshead, 1999), (Strischek, 2001), (Cocheo, 2004)</td>
</tr>
<tr>
<td></td>
<td>iii. Technology</td>
<td>(Wood, 1993)</td>
</tr>
<tr>
<td></td>
<td>iv. Supplier covenants/collaboration</td>
<td>(DeAngelo, DeAngelo, &amp; Wruck, 2001), (Wadhwa et al., 2006)</td>
</tr>
<tr>
<td></td>
<td>v. Competitors effect</td>
<td>(Filbeck &amp; Krueger, 2005), (Filbeck et al., 2007)</td>
</tr>
<tr>
<td>b. Micro level factors</td>
<td>i. Shareholders wealth</td>
<td>(Filbeck et al., 2007)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Internal Factors</th>
<th>What may affect WCM</th>
<th>References:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Macro level factors</td>
<td>i. Management System/Method/Practice</td>
<td>(Knight, 1972), (Edwards, Wagner, &amp; Wood, 1985), (Fredenberger, DeThomas, &amp; Ray, 1993), (Sathyamoorthi, 2002), (Deloof, 2003), (Johnson &amp; Soenen, 2003), (Srivastava, 2004), (Jaiswal &amp; Kaushik, 2005), (Lazaridis &amp; Tryfonidis, 2006), (Garcia-Teruel &amp; Martinez-Solano, 2007)</td>
</tr>
<tr>
<td></td>
<td>ii. Organizational behaviour</td>
<td>(Loeser, 1988), (Krisha, Dimitri, &amp; Victor, 1993)</td>
</tr>
<tr>
<td></td>
<td>iii. Investment policy</td>
<td>(Seidner, 1990)</td>
</tr>
<tr>
<td></td>
<td>v. Operation management/Supply Chain management</td>
<td>(Bartezzaghi, Turco, &amp; Spina, 1992), (Evans, Naim, &amp; Towill, 1993), (Refuse, 1996), (Fairchild, 2005), (Sehgal, Sahay, &amp; Goyal, 2006)</td>
</tr>
<tr>
<td></td>
<td>vi. Upstream collaboration/outourcing</td>
<td>(L. Hadley, 2006)</td>
</tr>
<tr>
<td>b. Micro level factors</td>
<td>i. Inventory management</td>
<td>(Raman &amp; Kim, 2002), (Yang, Ronald, &amp; Chu, 2005)</td>
</tr>
<tr>
<td></td>
<td>ii. Employees financial capability (knowledge)</td>
<td>(Cheatham &amp; Cheatham, 1993), (Hossain &amp; Akon, 1997)</td>
</tr>
<tr>
<td></td>
<td>iv. Payable Management</td>
<td>(Gitman, 2009)</td>
</tr>
</tbody>
</table>
An extensive survey of the literature from various academic disciplines shows few studies on the Malaysian context. In the United Kingdom legislation addresses how small business holders go about charging interest on overdue invoices (Peel et al., 2000), to protect small enterprises who are highly dependent on efficient working capital. Of course, the UK legislation may not suit the Malaysian context: measures must be attuned to relevant cultural and social circumstances. Consequently, this study will seek data (policies/legislations/regulations/research) from relevant local authorities (e.g. Central Bank of Malaysia, Economic Planning Unit, Malaysian universities, and research institutions) and from the array represented within Malaysian listed companies to establish linkages between external factors and WCM, and how these factors influence WCM.

5 Research Methodology – Qualitative Study

The dilemma of management to integrate WCM processes initiated this study, even though WCM research indicates alternatives to improve the WCM components by integration. It is argued that the failure of the WCM research to reflect the characteristics and challenges of contemporary organizational settings raised the need to gain an in-dept understanding of WCM practices in actual organizational settings. The approach adopted is primarily qualitative in seeking the in-dept understanding of complex phenomena by gathering data which provide a detailed description of event, situations and interaction of people in their natural settings (Cooper & Schindler, 2006, p. 198).

Since the research question will determine the research strategy (Yin, 2003), this study aims to answer the primary research question, “How is working capital managed in Malaysian Listed Companies’ context?”. The how and why questions are
more explanatory and likely to used case studies strategy (Yin, 2003), in contract, the use of survey (quantitative) by identifying the frequency and tendency will not be able to provide rich information of WCM practices. While, Berry and Otley (2004) state that case study is especially suited to understand the content, processes and contexts of the practice of accounting. Hartley (2004) further confirm that case studies are increasingly used in organizational studies because of growing confidence in case study methods as a rigorous research strategy in its own justification.

### 5.1 Multiple Case Studies

This study aims to understand the various practices around WCM currently used in Malaysian listed companies. As a result, multiple case studies will be used in this study to permit the researcher to observe replication between organizations for conceptualization purposes. Multiple-case studies provide a stronger base for theory building (Yin, 2003). Eisenhardt and Graebner (2007) emphasized that multiple cases generate more robust theory because the propositions are more deeply grounded in diverse empirical evidence.

The use of multiple case studies will provide valuable information to formulate the conceptual framework. The evidence collected from different companies indicates the vigorousness of research findings. However, the conceptual framework will not complete without extended knowledge of Malaysian socio-economic environment. Therefore data contained within policies, legislation, regulations, and research will be sourced from local authorities (e.g. Malaysian Central Bank, Economic Planning Unit, Malaysian universities, research institutions, and so forth) that related to WCM. The knowledge gained from Malaysian local settings will be used as part of the factors that may influence the WCM performance.
To summarize the research process: this study will collect and analyse the data from multiple case studies and local authorities to formulate a conceptual framework which explain the dynamic of WCM in Malaysian context.

5.2 Research Sequence

This study consists of two sequences both of which serve the purpose of understanding the determinants of WCM and ultimately developing a conceptual framework. Further, each sequence consists of multiple stages dealing with relevant literatures and actual practices (Figure 1). Scapens (2004) explained that working with case studies requires a comprehensive research plan, specified research questions, and all evidence should be recorded to ensure ‘procedural reliability’.

**Figure 1: Research Methodologies**

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Final Output</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Sequence 1</strong></td>
<td><strong>Research Sequence 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Literature Review to develop Research Directions</td>
<td>Refine Research Instruments using Focus Group Discussion</td>
<td>Multiple Case Studies  • In-dept interviews  • Observations  • Documents</td>
<td>Qualitative Data Analysis and Discussion</td>
</tr>
<tr>
<td>Understanding Malaysian Environment  • Legislation  • Policies  • Studies  • Reports  • Literatures</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**5.2.1 Research Sequence 1**

The research sequence 1 consists of three stages which will be briefly explained in this section;
Stage 1: Using literature review from various academic disciplines (accounting, finance, strategic management, operation management, and organizational behaviour) to identify the research questions.

Stage 2: Using research questions as a topic of focus group discussion (consist of management accountants, financial controllers, or CFO) to refine research instruments for fieldwork.

Stage 3: Using research instruments to collect relevant data by using multiple case studies. Semi-structured interviews will be undertaken with key informants who are directly involved with WCM. The interviews will be transcribed for analysis, and stored according to appropriate ethical standards. Archival records will be accessed (also through appropriate ethical process) to provide further insight. Data will be coded, categorised and themed for theoretical constructs and narrative explanations.

5.2.2 Research Sequence 2

The research sequence 2 consists of two stages which will be briefly explained in this section;

Stage 1: Using the literature of accounting, strategic management, organizational behaviour, operations management, and finance, internal and external factors that may affect WCM performance will be identified.

Stage 2: An extensive survey of this literature shows limited evidence related to WCM in Malaysian context because many WCM studies were done in Western countries. Therefore, this study requires relevant information from local authorities (e.g. Malaysian Central Bank, Economic Planning Unit, Malaysian universities, research institutions, and so forth) to extend the understanding of Malaysian socio-economic environment.
5.2.3 Developing Conceptual Framework

The final output of this study is to develop a conceptual framework that explains the determinants of WCM practices in the Malaysian context. Using the output from research sequences one and two, a process of triangulation will be used to validate the theoretical conjecture from the literature review with the multiple cases research findings. This process will require a constant comparison of data to develop the conceptual framework, in coherent manner.

5.3 Case Selection

In this study, participating companies will be purposely selected from different industries. Randomness is not explicitly sought because as Eisenhardt (1989, p. 537) states, “The sample was not random, but reflected the selection of specific cases to extend the theory to a broad range of organizations”. The participating companies will be selected from two sectors, 1) consumer products and 2) trade and services. These sectors are selected because the attempt given to improve WCM performance is greater. Further, companies in these sectors are mainly involved with manufacturing and/or service activities that consists of the elements of WCM (e.g. payables, receivables, inventories).

The selected companies should be categorized as large scale companies and publicly listed on the main board at Bursa Malaysia. Malaysian listed companies are required to comply with the International Financial Reporting Standard (IFRS) and this standard indicates companies operating in Malaysia are obligated to demonstrate effective management practices.

In this study, WCM practices will be observed and Malaysia is selected as a location because of the researcher’s knowledge of local business environment. The
researcher’s knowledge of local business environment may contribute to understand the determinants of WCM practices from Malaysian context.

One of the challenges in this study is to gain access into the participating companies. The sample size for this study cannot be established in advance; this is determined by the concept known as the level of saturation (Auerbach & Silverstein, 2003). In this study, the iteration between theory and data should stop when the incremental contribution to concept is minimal; a stage known as theoretical saturation (Eisenhardt, 1989).

The process to gain access into Malaysian listed companies will include the following procedure;

a) Selecting process (companies will be selected based on the specified criteria);

b) The selected companies will be notified by formal letter;

c) Follow up letter to remind the companies;

d) Follow up calls with appropriate officers to establish the connection;

e) Courtesy visits (if needed);

f) Gained access or more companies added to the candidates list.

This study will require approval from the Human Ethics Committee (HEC) of Lincoln University, the purpose of the HEC is to scrutinize that all research at Lincoln University which involves human participants meets established ethical standards. The human ethic approval will be used as one of the incentives for participants to ensure high quality of research and encourage their cooperation to the study.

5.4 Collecting Evidence

One of the crucial elements in case study approaches is to collect appropriate evidence, which will be discussed in this section.
5.4.1 Primary Evidence

Prior to the collecting evidence, focus group discussion will be conducted. Focus group will be directed through the research questions to help refine research instruments (e.g. further questions for informants) as well as help identify sources of data (e.g., archival records). Focus group will also help identify the appropriateness of the chosen data collection procedures, refine the data collection plans, and clarifying research questions and research design (Yin, 1994). In this study, focus group discussion should consist of management accountants, financial controllers, or CFO from Malaysian listed companies because they should provide appropriate information of WCM practices from their organizational context. Since many corporate offices are located in Kuala Lumpur, the focus group discussion will be held in the capital city of Malaysia.

In focus group discussion, researcher will be able to discuss with key informants how managers integrate/disintegrate the WCM decision making and what issues arise in the process. Focus group discussion is a good platform for researcher to identify WCM important issues in advance and possibly realigned research instruments. After focus group discussion, researcher will produce the revised version of research instruments, implementing of input obtained through the discussion. During the data collection, the researcher will be visiting the participating organizations where most of the WCM related executives are located, i.e., Kuala Lumpur, Malaysia. As primary evidence, semi-structured interviews will be used in this study where open and close ended questions will be combined. Close ended answers will enable researcher to find replication which can be compared and linked with other interviewees. Open ended questions will give interviewees flexibility to
express their experience and to explore the issues in depth and to follow up the responses that are given by the interviewees.

Theoretical sampling illustrates that participants are selected because they are particularly suitable for illuminating and extending relationships and logic among constructs (Eisenhardt & Graebner, 2007). In this study, interviewees will be purposely selected to ensure only qualified professionals contribute to the collection of evidence. Key informants related to WCM decision-making processes from participating organizations will be interviewed to understand the WCM practices. These key informants of WCM decision making processes will primarily be drawn from Financial Controllers, Management Accountants or Chief Financial Officers (CFO) because most of their time dedicated to manage, monitor, evaluate and develop the WCM processes and strategy (Anand & Gupta, 2001; McInnes, 2000).

In this study, key informants will inform the researcher to the next interviewee that might be able to clarify the issues. This process is also known as snowballing technique. During interview sessions, researcher should be alert of any informal clues, which could identify to new issues. Therefore, the researcher may ask further questions which may extend the topic or clarify the issues.

5.4.2 Secondary Evidence

The researcher will require secondary information to interpret the dynamics of WCM practices currently used in companies. In this study, other information such as organizational structure, company strategies, WCM policies, managers’ meeting (non-participant observation) and financial annual reports may be used to interpret the WCM practices. For example, for companies using a make to order strategy (amount of ordered products will determine the level of production) will require a specific method of WCM strategy. Moreover, credit policy and inventory strategy also need to
be examined to assist researcher explaining how managers manage the working capital activities.

The conceptual framework of WCM from Malaysian context is not complete without extended knowledge of the Malaysian socio-economic environment. In the research sequence two (refer to 5.2.2), researcher will require information from local authorities to discover the linkages between external and internal factors in relation to WCM. The understanding of Malaysian local setting should consists of areas that may have affected the WCM performance, such as Malaysian political influence, social aspects, economic stability, legislation, financial regulation, industrial effect, and so forth. The local authorities, Malaysian Central Bank, Economic Planning Unit, local universities, and research institutions have conducted studies, compiled reports, and collected information that link local business environment with the performance of Malaysian listed companies. However, this information is not available electronically; therefore, researcher should visit the respective institutions with formal letters to gain access the information needed. This information may be useful to validate the influence of external factors in WCM decision making process of managers at Malaysian listed companies.

5.5 Data Analysis

In this study, the primary and secondary evidence will be transcribed into text format and coded to appropriate categories. According to Lofland, Snow, Anderson, & Lofland, (2006), analysing qualitative evidence involves coding data into categories that organize it and portray it to one or more frameworks or set of ideas. The coding process will employ predetermined categories. However, as different issues arise during study, new categories will be created to illustrate the pattern explaining the dynamic of WCM practices. One of the advantages in the case study approach is the
opportunities to view issues from the eyes of research participants, which involve narratives and dialogues in telling stories and presenting other evidence that arise from their natural settings. Case study researchers frequently discover new issues during their journey (Auerbach & Silverstein, 2003).

Figure 2: Operational of Multiple Case Studies

The conceptual framework of WCM will be built through a process of triangulation that uses the results of literature reviews and empirical evidence from multiple case studies. In analysing the empirical evidence (Figure 2), each of the case reports should explain how and why a particular proposition was or was not identified (Yin, 2003). On the other hand, in across cases, the explanations of why the replication of patterns identified in certain cases, but not in other cases (Yin, 2003). Further, developing theoretical narrative is particularly difficult when dealing with increasing number of companies (Eisenhardt & Graebner, 2007). Therefore, Eisenhardt and Graebner (2007) suggested that building a concept in sections or by important propositions that are supported by evidence will be a practical way to solve the challenge. Further, summarizing each case evidence using tables and organizing it
in a coherent manner will structuralize the conceptualisation process (Eisenhardt & Graebner, 2007).

Since the interviews and archival records will be used for data analysis, the amount of data is suspected to be large. Thus, this study requires a systematic approach to organize the data. Fortunately, the NVivo8 software intends to support researchers to manage data, manage ideas, query data, graphically model, and report from the data (Bazeley, 2007). NVivo8 software will assist researchers to organize data in a systematic manner and to recognize the pattern lies between the data. The software also will assist the researcher in the concept-building process. The development of a conceptual framework will be more organized and effective if the use of NVivo8 is fully utilised.

6. Limitations and Delimitations

The main limitations of this study will be the constraints due to limited time and financial support (Appendix 1 & 2). The conceptualisation process requires an understanding from large amount of data. Collecting appropriate evidence is essential to analyse the data and various modifications to categories will lengthen the period. Hence the longer research takes, the higher the cost of the project.

The limitations can be minimised by organizing the research process more effectively. Scapens (2004) suggests the following procedures to manage the case-based studies more effectively,

a) All evidence collected should be recorded in an ordered and systematic manner;

b) Notes and memos should be converted into a more formal record as soon as possible; and
c) It is suggested that researchers should have plenty of time in between interviews to gain focus on the issues by relating interviews previously conducted, expecting some directions or explanations from next interview, and how to conduct appropriate interviews that lead to important evidence.

References


## Appendix 1: Research Schedule

This project began since 2nd July 2007 and the completion of the project will be on the 31st Aug 2010. The activities and period will be allocated as follows:

<table>
<thead>
<tr>
<th>Activities/Time Line</th>
<th>7’07</th>
<th>9’07</th>
<th>12’07</th>
<th>3’08</th>
<th>6’08</th>
<th>9’08</th>
<th>12’08</th>
<th>3’09</th>
<th>6’09</th>
<th>9’09</th>
<th>12’09</th>
<th>3’10</th>
<th>6’10</th>
<th>8’10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Research Question</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write Research Proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present Research Proposal to Commerce Division</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Approval</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refine Research Instruments/Human Ethic Committee Approval</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding of Malaysian Local Setting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determinants of WCM/Conceptual Framework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write Thesis &amp; Result Presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defend Thesis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Editing and Binding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit thesis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2: Research Budget

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (NZD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Printing and Photocopying</td>
<td></td>
</tr>
<tr>
<td>2 NVivo8 Training (25th July 2008)</td>
<td></td>
</tr>
<tr>
<td>3 Editing Assistance (20 hours x NZD20)</td>
<td></td>
</tr>
<tr>
<td>4 Thesis (4 copies x NZD80)</td>
<td></td>
</tr>
<tr>
<td>5 Focus Group Discussion (Sept-Oct '08)</td>
<td></td>
</tr>
<tr>
<td>5.1 Airfare (Christchurch-Kuala Lumpur)</td>
<td></td>
</tr>
<tr>
<td>5.2 Rental of Meeting Room (with lunch for 10 people)</td>
<td></td>
</tr>
<tr>
<td>6 Multiple Case Studies/Understanding Malaysian Local Setting (February '09 - June '09)</td>
<td></td>
</tr>
<tr>
<td>6.1 Airfare (Christchurch-Kuala Lumpur)</td>
<td></td>
</tr>
<tr>
<td>7 Domestic/International Conference</td>
<td></td>
</tr>
<tr>
<td>7.1 TBA</td>
<td></td>
</tr>
</tbody>
</table>

Note:

* If the budgeted amount is not sufficient, the researcher will pay any additional charges occurred from the conference.