The Structural Relationships between Corporate Culture, ICT Diffusion Innovation, Corporate Leadership, Corporate Communication Management (CCM) Activities and Organisational Performance

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Marketing

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Dedication

I would like to dedicate this thesis to my late mother (Rahmah Talib), my late father (Mohamad Abdul Manaf) and my siblings whose continual support helped me to achieve my dream.

Acknowledgments

I would like to express my gratitude to many people for the support I received during the time that I studied at Brunel University. First, I would like to sincerely thank my first supervisor, Professor T.C. Melewar, who always believed in my project and showed me what a great teacher is like. I thank my second supervisor, Professor Ruth Simpson, who was very patient with my writing and who gave me several constructive comments about my thesis. I also thank faculty members from other schools, especially Dr Johan van Rekom (Erasmus University, Rotterdam) and Dr Klement Podnar (University of Ljubljana), for their professional advice.

I thank the top management of the Universiti Utara Malaysia (UUM), who believed in my potential, let me join their dynamic organisation, and fully supported my study. Special thanks go to my UUM colleagues especially Dr Hassan Abu Bakar, Associate Professor Dr Hisham Dzakiria and Associate Professor Dr Mohd Dan Jantan for their help and support in writing up this thesis.

I am also indebted to many PhD colleagues here, who constantly helped me out of difficult situations and never failed to make me happy even during the stressful months of writing up. I thank my friends (Dr Ahmed Rageh, Dr Narissara Kawesurin, Dr Shafinar Ismail, Dr Matilda Chen, Nor Aida Abdul Rahman, Dr Jae Lim, Suzari Abdul Rahim, José Benedicto Royuela, Dr Roland Bartholme and Pantea Foroudi) for the regular support and wonderful discussion we always had together. I also thank my Malaysian friends, especially Husni Hassan, Jailani Muda, Dr Jafri Zulkepli who made my days here delightful. My special thanks go to Bapak Faisal and families in Jakarta, who were so kind to me and whom I cordially regard as a part of my family.

Finally, I would like to thank my late parents for their love and support, which allowed me to come this far in my educational process. I also thank my sisters, brothers, nieces and nephews, who morally supported everything I did when I had to come to the UK. Most importantly, I thank the Ministry of Higher Education of Malaysia who sponsored me and met all my expenses, which enabled me to complete my studies.

Declaration

This is to declare that:

- I am responsible for the work submitted in this thesis.
- This work has been written by me.
- All verbatim extracts have been distinguished and the sources specifically acknowledged.
- During the preparation of this thesis, some papers were prepared as listed below. The remaining parts of the thesis have not yet been published.

Publications

Bahtiar, M. and Melewar T.C. (2011). "A Qualitative Study on the Corporate Communication Management (CCM): Antecedents and Consequences", Proceedings of *The Conference on Corporate Communication 2011*, Corporate Communication International at Baruch College/CUNY, New York, United States of America, June 7 - 10, 2011.

Bahtiar, M. and Melewar T.C. (2010). "Antecedents and Consequences of Corporate Communication Management (CCM): A Study of Malaysian Public Listed Companies", Proceeding of *The 7th International Conference of Corporate Identity/Association Research Group*, Institute of Marketing and Management, Leibniz University, Hannover, Germany, October 1–3, 2010.

Bahtiar, M. and Melewar T.C. (2010). "Antecedents and Consequences of Corporate Communication Management (CCM): Review of Literature, Conceptual Model and Research Hypothesis", Proceedings of *The 15th International Conference on Corporate and Marketing Communications*, Aarhus School of Business, Aarhus University, Denmark, April 21-23, 2010.

Bahtiar, M. and Melewar T.C. (2009). "Investigating the antecedents and consequences of corporate communication management", Proceedings of *The Conference on Corporate Communication* 2009, Corporate Communication International, Wroxton College, Oxfordshire, England. June 5-8, 2009.

in a degree programme at this or any other
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Abstract

Corporate Communication Management (CCM) is an important concept within the communication and marketing discipline. The term corporate communication came to the attention of the general public more than 40 years ago, due to changes in global business environments. Although corporate communication received great attention from scholars and the business community, its complex concepts are still unclear. Furthermore, many scholars believe there are influences of corporate culture, ICT diffusion innovations and corporate leadership on corporate communication and its impact to organisational performance, yet there is a paucity of studies on the validation of this theoretical assumption. Therefore, the purpose of this study is to address this gap by providing an elevated understanding of the concept of CCM and its antecedents, and in consequence, focus on organisational performance from the managerial perspectives.

This study employs a two tier mixed-method research process involving qualitative and quantitative approaches. The first tier commences with a semi-structured interview (with 12 respondents) to refine a conceptual framework developed based on existing literature. Then, content validity (with 10 expert opinions) and pilot test (with 35 respondents) follow, to develop a measurement scale with good validity and reliability. The second tier involves online survey data (with 223 respondents) and secondary data (from Thomson DataStream) to test the research hypotheses and proposed conceptual model. In this stage, structural equation modelling (SEM) is employed. Results indicate a very good fit to the data, with good convergent, discriminant and nomological validity and reliability stability.

The findings of this research show that corporate culture, ICT diffusion innovation and corporate leadership are factors that influence CCM directly. While CCM correlates positively with financial performance, it has no effect on mission achievement. Corporate culture was found to have a positive relationship with mission achievement but negative relations with financial performance. Furthermore, ICT diffusion innovation demonstrates a positive association with mission achievement. Despite corporate leadership having a positive relationship with mission achievement, there was no effect on financial performance. Therefore, this study answered the antecedents and consequences of CCM, and they were

found to be influential factors. In addition, the study demonstrates that managers rely on internal factors such as corporate culture, ICT diffusion innovation and corporate leadership to predict and assess CCM.

The findings have implications for knowledge of theories and practices, and also contribute in the development of a model that explains the CCM functions and shows that functions have a definite positive impact on financial performance. Furthermore, the research adds an insight to a growing body of communication literature (primarily corporate communication) and makes recommendation for future research directions.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

This research is focused on the influence of corporate culture, ICT diffusion innovation and corporate leadership on corporate communication management (CCM) and its impact on organisational performance. This chapter initially introduces the background and problem statement of the study. The next section discusses the research objective of the study, and is followed by a review of the conceptual foundation and methodology. Then, the expected research contributions of the research are highlighted. Finally, this chapter presents the structure of the study.

1.2 Research Background

1.2.1 Overview

The focus on corporate communication management (CCM) in the area of communication and marketing has a long history. It started as early as the 1970s (Yamauchi, 2001) and became widely researched in the 1990s (Argenti, 1994; Goodman, 1995; van Riel, 1995). Throughout the 20th century, the field of corporate communication developed in schools of communication and journalism and became categorised as public relations or public affairs (van Riel, 1995). After realising the importance of corporate communication in business, many business schools began to focus on it, and make it part of management communication (Argenti, 1996). Consequently, these situations made the field of corporate communication more important for the organisations (van Riel, 1995) and many scholars believe that corporate communication has evolved within the business environment more rapidly and much more systematically (Argenti, 1996; Cornelissen, 2008).

The notions of corporate communication received the greatest attention in the 1990s (Goodman, 1994; van Riel, 1995) due to expansion of the global business environment. At that time, corporate communication practitioners faced great challenges to deal with a 'new generation' of stakeholders which is more educated and demanding (Dowling, 1990). This development brought strategic approaches in corporate communication practices and

functions in order to gain stakeholders' support (Argenti, 1996; Cornelissen, 2008; Cornelissen *et al.*, 2006).

In parallel with the business attention on strategic corporate communication, academic research also underwent significant growth. Many scholars started to venture into the corporate communication discipline and give a conceptual perspective on it (Argenti, 1994; Illia and Balmer, 2012; van Riel, 1995). In addition, some academic literature (Varey 1997; Goodman, 2001) also contributed to empirical knowledge. Varey (1997), for example, contributed to an empirical study on corporate communication management in the UK, while Goodman (2001) studied the corporate communication trend in the US. Both researchers used organisations as units of analysis in their study. Later, many researchers started to study the antecedents and consequences of corporate communication and other related variables (Bishop, 2006; El-Haddadeh *et al.*, 2012; Higgins and Bannister, 1992; Malmelin, 2007; Yamauchi, 2001). Theories from strategic management and social sciences disciplines are commonly used to study corporate communication functions, its antecedents and consequences (for example Balmer and Gray, 1999; Dolphin and Fan, 2000; Sharma and Kamalanabhan, 2012; Stainer and Stainer, 1997).

Although many scholars were devoted to studying corporate communication as a strategic management (Cornelissen *et al.*, 2006; Goodman, 2006; Pollach *et al.*, 2012), little attention has been paid to the link between corporate communication on its internal factors (corporate culture, ICT diffusion innovation and corporate leadership) and organisational performance (Forman and Argenti, 2005). In general, Cornelissen and Lock (2001) believe that a better and improved corporate communication management will create a more positive effect on organisations. This indicates that strategic corporate communications instrumentally increase positive performance, and can also be used symbolically to increase visibility (Cornelissen *et al.*, 2006) and will make this field more respectful and accredited by top management (Macnamara, 2006).

It is encouraging to learn that the role and function of CCM is slowly being felt and adopted, but there are still vast areas that warrant research (van Riel, 1995; Varey, 1997). Apart from its antecedents and consequences, some issues concerning the research methodology such as

validity of measurement scales are only investigated in some specific context, especially in the US and some European countries (Goodman, 2001; Varey, 1997), whereas, similar research focusing on other continents or countries is lacking. Therefore, such scales may lack external validity. This has created a lot of opportunity for scholars to undertake research which contributes significantly to the growth of research in the area of corporate communication.

Currently. corporate communication management (Argenti, 1996: Sharma and Kamalanabhan, 2012) is rapidly changing. A review of the extant corporate communication literature reveals that there have been few attempts to define the concept of corporate communication and its dimensions (Argenti, 1998; Cornellisen, 2008; Goodman, 2000; Illia and Balmer, 2012; Meintjes et al., 2012; van Riel, 1995). Apart from being an unclear concept, the corporate communication academic foundation has crossed to multi disciplinary subjects, making it difficult to understand (Christensen et al., 2007; Goodman, 2000). Moreover, the influence of institutional factors of CCM such as corporate culture, ICT diffusion innovation and corporate leadership and it outcomes, also among the primary issues, need to be investigated further. Therefore, this study aims to address the gap in the literature and to help further increase our understanding of the concept of CCM and its antecedents and consequences from a managerial perspective.

1.2.2 Problem Statement

Over the past decades, corporate communication practitioners have struggled to gain attention from top management (Burson, 1993). Indeed, many managers in organisations are sceptical concerning the role of corporate communication on performance (Pincus *et al.*, 1994). The main reason is that corporate communication practitioners have failed to convince the top management on the economic or financial values of corporate communication (Burson 1993; Chang and Abu Hassan, 2006; Macnamara, 2006). Consequently, their roles gain less attention from top management. For example, in the 1998 Malaysian economic downturn, many organisations cut their management budget which most affected their corporate communication and public relations departments. In addition, the current European economic crisis has also affected the public relations profession, whereby half of all public relations

professionals are suffering from budget cuts and almost a quarter is facing staff reduction (Moreno *et al.*, 2010). Consequently, budget cuts not only involve corporate communication programmes, but lead to the downsizing of staff. Top management believes that corporate communication has not contributed to financial outcomes or monetary worth to the companies (Burson, 1992, 1993; Macnamara, 2006). To overcome this issue, corporate communication practitioners must be able to demonstrate their CCM effort is worthwhile and significantly effective for financial performance. Forman and Argenti (2005) suggest research focused on CCM outcomes, which might include the effect on sales or increase in stock price. Furthermore, the CCM function should place the logic underlying economic values with the implementation of a public relations programme (Ehling, 1992; Macnamara, 2006). To date, there is no research on the relationship between CCM and financial performance.

Apart of the important outcomes of CCM, many also suggest looking further at its antecedents (Clausen, 2007; Malmelin, 2007; Veltri and Nardo, 2013; Yamauchi, 2001) such as corporate culture. As determinants of CCM, corporate culture is an intangible element that can help organisational health by attracting and retaining a person of quality (Goodman, 2001) and providing competitive edge to the organisation (Sadri and Lees, 2001). Many management studies have proved the contribution of cultural elements in the organisational system. For instance, human resource study believes that a positive corporate culture will affect employees' commitment (Rashid et al., 2003) and job satisfaction (King et al., 1988; Pettit et al., 1997; Wheeless et al., 1983). Furthermore, leadership communication research reveals a similar result (Hetland and Sandal, 2003; Oh et al., 1991; Snyder and Morris 1984; Takala, 1997). However, corporate culture is not a main focus of corporate communication study, even though some research (Cornelissen et al., 2006) highlights the importance of this variable. Therefore, further study on the interrelationship between corporate culture and corporate communication, particularly regarding different corporate settings, is needed (Clausen, 2007). Comprehending the corporate culture role in corporate communication study will enhance the crucial role of corporate communication.

Furthermore, due to the internet development (information technology) in the 21st century, the pattern of communication in the business environment has changed (Goodman, 2001). Information technology advancements have allowed organisations to use information

technology to communicate with various stakeholders (Papastathopoulou *et al.*, 2007). The website, for example, has become an important tool to improve identity and to highlight corporate citizenship, social responsibility, policy explanation and sometimes, to influence public behaviour. Current information technology reduces errors and aids the ability to place information and maintain the strategic communication frameworks of organisations. However, there is limited study on the management role of ICT diffusion innovation towards corporate communication. Therefore, there is a need to know more about the best practices of innovative technology in companies that help them to implement corporate communication programmes effectively (Forman and Argenti, 2005).

Although the above mentioned issues indicate the effects of corporate communication on the world's landscape of organisations, there is limited knowledge pertaining to the process underlying CCM building and management. Many studies typically focus on the relationship between CCM and other variables, whereas only a few s examine the CCM concept from the process point of view. Therefore, it is imperative for further research to be carried out to investigate the concept of CCM and the variables that affect CCM. To date, CCM research has been conducted from various perspectives, as summarised below.

- 1. The research on conceptualisation of CCM focuses on defining and comparing the construct with other relevant concepts. Moreover, the perception concerning CCM by different stakeholders' groups such as employees and managers and the development of CCM scale also belong to this kind of research (Christensen *et al.*, 2007; Elving, 2010; Goodman, 2010; Goodman, 2001; Illia and Balmer, 2012; Kitchen, 1997; Shelby, 1993; Varey, 1997; Varey and White, 2000).
- 2. Studies on the antecedents of CCM are attempts to reveal possible variables that affect CCM. In this case, CCM is treated as a dependent variable as it involves the relationship with other groups of variables such as culture and leadership. However, only a few studies (Clausen, 2007; Malmelin, 2007; Veltri and Nardo, 2013; Schultz and Wehmeier, 2010; Yamauchi, 2001) have investigated the mechanisms underlying the CCM building process.

- 3. Studies focusing on the consequences of CCM treat CCM as an independent variable. A very popular sub-type of research is the investigation of the effect of CCM on organisational performance such as mission achievement, job commitment or reputation (Bishop, 2006; Higgins and Bannister, 1992; Sharma and Kamalanabhan, 2012; Vu et al., 2011). Yet again, few studies have been conducted on the mechanism underlying the positive impact of CCM.
- 4. The application of CCM in managing a crisis is part of marketing and communication research. This kind of research investigates CCM functions (for example, public relations, investor relations and media relations) in helping organisations to be more efficient, professional, and to prevent various forms of crisis (Balmer and Gray, 1999; Fassin and Buelens, 2011; Dolphin and Fan, 2000; Gupta, 2011; Hargie and Tourish, 1996; Meintjes *et al.*, 2012; Pollach *et al.*, 2012; Steiner, 2001; Tourish, 1997; van Riel, 1992).
- 5. The research on the dynamism of CCM is primarily studied in a cross-sectional manner. Little research has been undertaken to investigate the change of CCM, as well as its effect over time (Arvidsson, 2012; Argenti, 1996; El-Haddadeh *et al.*, 2012; Ihator, 2004; Goodman, 2000; Goodman, 2001).

Based on the above perspective, this study is particularly concerned with the first four types of CCM research. In line with previous studies (Argenti, 1996; Varey, 1997; Balmer and Gray, 1999) this research is interdisciplinary. It utilises three main theories, namely institutional theory, communication theory and signalling theory from marketing, communication and economic fields to form a conceptual model.

Therefore, in order to deal with the current issues with CCM, as highlighted, this study aims to explore the concept of CCM, using Malaysian public listed companies as the context in which to do so. Another aim is to investigate the antecedents and consequences of the underresearched construct of CCM, with particular attention paid to organisational performance.

1.3 Research Objectives and Questions

There are two primary research objectives in this study. Firstly, it aims to empirically investigate a model within an organisational setting which will help to examine the dimensions of CCM. These contain the reassessment of the constructs' dimensionality and operationalisation and the evaluation of certain assumptions linked to the findings in the literature. The second objective of this study is to develop a model to explain the antecedents and consequences of CCM. The research proposes to identify and examine the influence of corporate culture, ICT diffusion innovation and corporate leadership, which are key antecedents of CCM and also seeks to explain the impact of CCM on organisational performance. Specifically, the aim of the study is to answer the following question:

What are the institutional perspectives on what qualifies as antecedence and its consequences on CCM? This question can further be divided into five sub-questions as follows:

- a) What shapes CCM in corporate companies? More specifically, what are the specific antecedents that influence CCM activities of corporate companies? Are institutional factors such as corporate culture, ICT diffusion innovation management and corporate leadership determinants of CCM?
- b) What is the relationship, if any, between CCM and organisational performance as an institutional measure of competitive advantage?
- c) What is the relationship between corporate culture and organisational performance?
- d) What is the relationship between ICT diffusion innovation and organisational performance?
- e) What is the relationship between corporate leadership and organisational performance?

The conceptual foundation and methodology of this research are discussed in the following section.

1.4 Conceptual Foundation and Methodology

This study employs a mixed-method research process, involving qualitative and quantitative approaches. A semi-structured interview is used in order to gain an understanding of the topic and to refine a conceptual framework that has been developed, and which is used to purify measures for the questionnaire (Churchill, 1979). Data are analysed by NVivo 9.0 qualitative research software. Opinions experts from the marketing and corporate communication fields are gathered to calculate the content validity index (CVI) for assessing the representativeness and clarity of each item (Rubio *et al.*, 2003). A pilot test examines the reliability of items and constructs (Cronbach's Alpha and item-to-total correlations). A self-administered questionnaire is used to measure each of the constructs, and this is distributed through an online survey. Based on the main data, identification of any possible data problems is possible and doing so will confirm the validation of the findings (Baker, 1994; Deshpande, 1983). Along with primary data, secondary data from Thomson DataStream are used to measure the financial performance of the companies. At this stage, structural equation modelling (SEM) is employed by using AMOS 18.0 software.

Corporate communication practitioners from public listed companies of Malaysia Stock Exchange (MSE) are chosen. This research considers several criteria. First, the MSE has regulated that the financial report of public listed companies must be made available to the public (Rashid *et al.*, 2003), which helps in accessing the accounting-based performance for each company. Second, the corporate companies listed on the MSE have a combined market capitalisation of US\$420 billion of Malaysian business equity as of 31 June 2012. Third, public listed companies under the MSE comprise more than 1,020 reputable companies representing various industrial sectors, which allows for cross-comparisons regarding their adoption of CCM. Fourth, these companies must be among the most advanced companies in Malaysia, which (1) helps to observe institutional pressure and be clearly measured within the institutional factors; (2) has a strong influence on capitalising and practicing CCM both internally and externally to their stakeholders; (3) research indicates CCM as a strategic function would be a natural course of public listed companies activities; and (4) sufficient and reliable data can be acquired for measurement scale refinement and hypotheses testing.

Based on the research questions which are consistent with other research (Varey, 1997; Yamauchi, 2001), the unit of analysis of this study for both qualitative and quantitative approach is the company. The study focuses on the relationship between a company level construct and institutional factors.

1.5 Expected Potential Contribution

This research seeks to contribute to existing theories by extending and testing theories, verifying conceptualisations of developing and testing a theoretical model.

First, this research will present the understanding of CCM practices by adding different insights to the possible determinants and consequences in the contexts of public listed companies in a non-western country. This research will illustrate the effects of institutional factors (corporate culture, ICT diffusion innovation and corporate leadership) and yield any financial or social benefit to corporate communication. In addition, this study will look at the theories' applicability. Examining the CCM model in a non-western country, in this case Malaysia could afford additional insight into the extant literature from the non-western context (Hofstede, 1980).

Second, although most corporate communication researchers and executives may benefit from using an integrated and systematic management framework, the academic field of corporate communication is scattered and divergent, and lacks coherence (Belasen, 2008). Therefore, a broader view of corporate communication is needed, because concepts and practices need to be refined and better understood. The dimensional knowledge in this research will provide a better understanding of the complex driving force of CCM and its strategic outcomes (Cornelissen *et al.*, 2006). Moreover, this research contributes a deeper understanding to the dimension of each construct and operationalisation of the proposed framework.

Third, the literature review indicates CCM scales of measurement are not well developed (Cornelissen *et al.*, 2006; Goodman 2001; Gupta, 2011; Varey, 1997). The factorial structures of CCM have not been verified, which has led to a suspicion of their measurement properties,

namely face validity and discriminant validity. Therefore, the research methodology of item development could validate the significant dimensions of CCM as a focal construct. In addition, this study provides evidence and confirms previous scales of construct validity and reliability.

Finally, by reassessing the incomplete findings reported in previous studies, this study will contribute a new insight to existing knowledge. For example, some study (Pincus, 1986; Pettit *et al.*, 1997; Varey, 1997) recommends that communication is positively associated with organisational performance. However, this was not tested on CCM, and research has no empirical research on the relationship between CCM and financial performance (Forman and Argenti, 2005).

This study seeks to enhance managers' knowledge and understanding of CCM practices and strategies. These may be useful because of the positive consequences that could be generated (For example financial performance and mission achievement) from such knowledge. Furthermore, this study intends to inform managers about particular activities that could be undertaken as CCM strategies. The managers could be well informed about good CCM practices, and this in turn could make them more effective managers.

Firstly, an organisation focuses on their core strategic corporate communication activities (for example, campaign, image management, branding, and corporate reputation and media relations) in an attempt to project these values to their stakeholders (Fleisher, 1998). Therefore, this study could demonstrate the strong CCM functions to execute management strategy to their stakeholders through creating awareness and changing perceptions. It will show the strategic role of communication in the business which must be approached. Furthermore, it is useful to understand the corporate communication functions that contribute in enhancing CCM practice and its impact to organisational performance.

Secondly, the effect of CCM on social and institutional factors is not well understood at the managerial level. This study will offer explanations regarding both issues to managers. The research will inform the importance of financial and non financial criteria (ROI, ROA, ROE, mission achievement, etcetera) on CCM in an institutional context. In addition, it will offer

an explanation of developing corporate communication by handling institutional factors (corporate culture, ICT diffusion innovation and corporate leadership) appropriately. The findings will demonstrate the role of top management through the strong company policy to discourage or encourage CCM as a strategic management tool.

Finally, literature has confirmed the strong influence of corporate culture to enhance positive communication in organisations. Therefore, the finding will explain its contribution on CCM. Although, ICT diffusion innovation demonstrates a strong influence on communication programmes (Anumba and Duke, 1997; Tam, 1999; van den Hoof *et al.*, 2005) its relationship with CCM is limited. So, this study will offer the management role of ICT diffusion innovation such as professional development and technical support; and supervisor and organisational support to better CCM (Peansupap and Walker, 2005).

As discussed earlier, current issues concerning CCM practices in some countries have several implications for policy makers and regulators. Regulators are conscious of the impact of CCM and the changes on the corporate landscape that may have disrupted the operation of companies and potentially implicate the organisational performance.

Three aspects from the findings are expected to be useful to public policy makers. Firstly, policy makers will be taught how to practice CCM in their organisations. For instance, this study will help regulators to formulate the policy effectively (to develop a code of ethics for the corporate communicator) or amend existing regulations to facilitate the CCM process. Similarly, professional bodies which act as other policy makers (for example, IPRM, MIRA and IABC) will be able to help their members to achieve favourable stakeholder's appraisal through professional training and monetary support to extend the professional status of corporate communication practitioners.

Secondly, this research seeks to notify policy makers of the best way to practice CCM, which can be implemented as a guideline and indicator for the performance measurement for organisations. The government and professional bodies can learn from the findings of this study to design effective measurement mechanisms as possible indicators for success and effectiveness. It will further provide policy makers with more information on the technique of

CCM measurement and organisational performance, and be able to design corporate communication professionalism training programmes.

Lastly, this study may be useful for those undertaking research as it could improve their understanding of the influence of CCM on performance of organisations. Therefore, the testing of Western ideas and the theories of management practices can be undertaken to show their suitability and practicality for a workforce other than a western one (Abdullah, 1992). Such a researcher could then examine further the generalisation of the theories. In addition, it will help those involved in the teaching of the subject to understand the practical concept of CCM in developing suitable courses, setting up appropriate criteria and outlining relevant qualifications for the future direction of CCM in the higher education system. Managers of corporate communications will have the option to study their discipline from a strategic management perspective and help them to strengthen their professional status.

1.6 Structure of the Thesis

This thesis is divided into seven chapters. Chapter 1 starts with the introduction to the research, describes the background and scope of the study and specifies the research questions/objectives, conceptual foundation and methodology. This is followed by the expected contribution. Chapter 2 reviews the existing literature on CCM, beginning with a discussion about the definition and the concept of CCM, followed by the effects on CCM from a management and marketing perspective. The chapter ends by identifying the gaps in existing research. Chapter 3 describes the conceptual model of the research and explains the development of hypotheses. The linkages between CCM and variables from both concepts are then elaborated. Finally, the impact of CCM is explained, and hypotheses are presented. Chapter 4 discusses the research methodology and the data analysis techniques employed. The research design includes the research setting and data collection procedures. Lastly, data analysis techniques and related underlying assumptions are highlighted and described.

Chapter 5 presents the findings from the quantitative methods employed. This chapter indicates the process of data screening. Then, the results of scale reliability and validity test using confirmatory factor analysis are presented. The chapter ends by showing the outcomes

of hypothesis testing and modelling development. Chapter 6 elicits the research findings. The outcomes of the scale development and purification are reviewed, and the results of hypothesis testing are discussed. Finally, Chapter 7 presents the conclusion of the research. This chapter summarises the results of this study and the thesis. It describes the research implications in theoretical and managerial aspects. Limitations of this research are then explained. Possible future research directions are also given.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Generally, two ways symmetrical model of public relations are widely practised by corporate communication practitioners who are more concerned with stakeholders' feedback (Cultlip *et al.*, 2000). Therefore, the topic of studies relating to multiple stakeholders such as media relations, crisis communication, issues management, community relations and public affairs become important to them. Due to expansion of global business environments in the early 21st century research on corporate communication expanded dramatically and covered various issues across multi disciplines including strategic management, marketing, communication and investor relations (Argenti, 2000).

Although corporate communication received attention, the concept of corporate communication is still under-developed and needs more attention (van Riel, 1995; Varey, 1997) because several unsolved issues exist. For example, the issues of dimensionality and measurement concepts of corporate communication (Macnamara, 2006) are still not well understood. In addition, issues like the relationship between corporate communication and other variables such as organisational performance (Forman and Argenti, 2005; Stainer and Stainer, 1997), culture (Clausen, 2007), leadership (Fiol, 1995) and technology (Forman and Argenti, 2005) remain unclear.

This chapter reviews literature on the determinants and outcomes of corporate communication. It examines existing studies on the area of communication, strategic management, marketing, public relations and sociology. The chapter begins with a discussion regarding the definitions, typologies and dimensionalities of the corporate communication. The effects of corporate communication on strategic management and marketing will then be reviewed. Finally, research gaps will be shown and discussed.

2.2 Defining Corporate Communication

The definition of corporate communication can be seen from different perspectives. Table 2.1 shows the various definitions which exist.

Table 2. 1 : Multiple definitions of corporate communication

Related References	Year	Definitions
Jackson	1987	Corporate communication is the total communication activity generated by the company to achieve its planned objectives.
Shelby	1993	Corporate communication locus is collectivities that exist inside and outside organisations. Its focus is intervention, based on both analysis (environmental scanning, for example) and synthesis (comprehensive issues management plans). Its practical grounding is skills and method.
Blauw	1994	Corporate communication as an integrated approach to all communication produced by an organisation, directed at all relevant target groups. Each item of communication must convey and emphasise the corporate identity.
van Riel	1995	Corporate communication as an instrument of management by means of which all consciously used forms of internal and external communication are harmonized as effectively and efficiently as possible to create a favourable basis for relationships with groups upon which the company is dependent.
Gray	1995	Corporate communication as an aggregate of sources, messages and media by which the corporation conveys it's unique or brand to its various audiences.
Schmidt	1995	Corporate communication as an internal and external information means and measures that aim to influence perceptions.
Goodman	2000	Corporate communication is a strategic action practiced by professionals within an organisation or on behalf of a client. It is the creation and maintenance of strong internal and external relationships.
Balmer and Greyser	2006	Corporate communications relates to the various outbound communications channels deployed by organisations to communicate with customers and other constituencies. At its most comprehensive (total corporate communications) it also takes into account the communications effects of management, employee and product behaviour and of word-of mouth and media/competitor commentary.
Van Riel and Fombrun	2007	Corporate communication can be defined as the set of activities involved in managing and orchestrating all internal and external communications aimed at creating favourable starting points with stakeholders on which the company depends.
Cornelissen	2008	Corporate communication as a management function that offers a framework for the effective coordination of all internal and external communication with the overall purpose of establishing and maintaining favourable reputations with stakeholder groups upon which the organisation is dependent.

Source: Developed for the study

Based on the above table, three salient characteristics of corporate communication can be delineated as follows.

Management instruments or tools: The concept of management in corporate communication is salient to many organisations (Argenti, 1994; Cornelissen, 2008; van Riel, 1995). The management function can be seen in corporate communication in terms of planning, controlling, organising and coordinating the communication's message to internal and external stakeholders of the organisations.

Internal and external communication: During the transformation process of an organisation, internal communication is the sharing of messages which includes giving and taking orders and directives, generation, dissemination and interpretation of performance data and task instructions (Varey, 1998); while external communication messages are shared between organisational members and external audiences in the form of promotional messages through mass communication media and inward in the form of market information. The medium of communication (media) is dependent on who is the receiver (stakeholder). Media used by organisations to transfer organisational messages to stakeholders might vary. This may include: Internal mail, intranet, face to face, circulars or bulletins. However, to attend to various numbers of external stakeholders, mass communications instruments such as electronic media (television and radio), print media (newspaper and magazine) and new media (internet) are the most influential to persuade stakeholders.

Stakeholders or audiences: The receiver of the organisational's message is a stakeholder. Stakeholders can be divided into internal or external stakeholders (Cornelissen, 2008; Goodman, 2000; van Riel, 1995). For example, the employees and top management of the organisation can be considered as internal stakeholders, while external stakeholders may include media, non-governmental organisations (NGO), government agencies, customers and competitors.

For the purposes of this study, corporate communication will be defined as the management of organisational perception, which can be influenced from all internal and external

information (message of communication) means and measures (Cornelissen, 2008; Schmidt, 1995). Therefore, the collective message from both sources (Haynes, 1990) conveys an organisation identity (Gray, 1995; Gray and Balmer, 1998) through every form, manner and medium of communication to the respective stakeholders. A stakeholder in this context is defined as anyone who has a stake in the organisation's success including vendors, customers, employees and executives of the organisation (Goodman, 2000).

The CCM concepts in this study are based on the activities carried out by organisations. The low value of the CCM items will represent the less important aspects of CCM activities in the organisation. The high values of CCM represent the importance of those particular activities.

2.2.2 Typologies of Corporate Communication

The literature generally concludes there are two types of communication: internal communication, and external communication. In organisations, internal and external communication determines the effectiveness of corporate communication.

Internal Communication

Frank and Brownell (1989) define internal communication as transactions between individuals and groups at various levels in the organisation. Generally, internal communication is widely discussed under the headings of employee communication (Argenti, 1998), organisational communication (Grunig, 1992) and business communication (Kitchen, 1997; Oliver, 1997). However, in the context of corporate communication internal communication is "being broadly concerned with managing and administering communication resources and processes to facilitate communication within the organisations and between organisations and their communities" (Ticehurst *et al.*, 1991, p.81).

There are three important issues of internal communication in corporate communication. First, the connection between internal communication and the successful implementation of change management programmes (Daly *et al.*, 2003; Kitchen and Daly, 2002; Proctor and Doukakis, 2003; Welch and Jackson, 2007). Change management refers to how an

organisation changes their nature and the ways in which they do business (Murdoch, 1997). Based on this understanding management can proactively manage organisations' resources to stay competitive. The success of a change programme will depend on the function of corporate communication in communicating and disseminating the corporate message to internal key stakeholders. This task will have an impact on organisational performance.

Second, Tourish and Hargie (1996) and Forman and Argenti (2005) indicate that internal communication is a key step in evaluating and improving performance. As mentioned by Dortok (2006) employees are the important stakeholders in the internal environment of communication, and good employee communications are directly or indirectly influenced the company's business performance. For example, communication with the internal stakeholder makes a significant contribution to the corporate communication strategy (Dolphin, 2005). It provides a means of securing a greater involvement, reducing dissatisfaction, improving the decision making process and developing greater commitment.

Third, information technology has had marked impact on organisational success, and helps to improve corporate communication effectiveness in organisations (Goodman, 2001). Therefore, computer and technology literature and know how to access and evaluate information is important for employees (O'Donovan, 1998). For instance, the innovation in web-based technology has generated a range of new channels for employees to consider (Holtz, 2006) such as e-mail, voice mail and electronic meeting systems. New technologies improved communication flow, time use, access to information, attitude toward office system technology, and the quality of working life (Goldhaber, 1993).

External Communication

The management believe the future of the institutional environment of a company critically depends on the view of key stakeholders such as shareholders and investors, customers and consumers, and members of the community (Carroll, 1989; Freeman, 1984). The environment in this context refers to those external factors which have an impact on organisational functions. Traditionally organisations are dependent on the environment and must constantly adapt their goals, action strategies and structure in reaction to atmosphere

changes (Dill, 1958; Duncan, 1972; Hofer and Schendel, 1978; Steiner and Miner, 1977; Thompson and McEwen, 1958). It is also recognised as an important element in formulating strategy (Dirsmith and Covaleski, 1983).

External communication also focuses on the external environment of stakeholders such as neighbours, consumers, investors and regulatory bodies (Saunders, 1999). Generally, external communication tactics and channels include news releases, fact sheets, press kits, newsletters, company magazines, brochures and annual reports, speeches, news conferences, open houses and tours and philanthropic donations to public projects (Wilcox *et al.*, 1995). Even though web pages are not a typical public information mode as compared to print, electronic and others all tactics can be better integrated with new media (internet) as implicated by the advancement of technology.

External communication involves cross-functional disciplines (for example, advertising, issues management, investor relations, media relations and direct marketing) that consolidate a set of communication disciplines into one department (Cornelissen and Thorpe, 2001). Such consolidation is intended to strengthen inter-relations among a variety of disciplines, to facilitate the corporate and marketing communications functions, and to play a more focused and critical role in the company's strategic management (Duncan and Caywood, 1996). Therefore, the 'integrated communication' approach is designed to convey the message to various stakeholders. In this situation, the measurement of communication effectiveness is completely based on their ability to meet the communication goals such as increased awareness, positive attitudes and supportive action (Hon, 1997).

In order to gain a positive attitude from external stakeholders, the organisation should control the media when communicating a corporate message to them (Evans, 1987). For that purpose, some list several recommendations for the spokesperson of the organisation involved in relations with the media (Ailes, 1988; Blohowiak, 1987; Howard, 1989). The spokesperson should act competently as the organisation's representative when communicating with the community and media. More attention is focused on preparing for media interviews, training spokespersons, employing winning communication strategies, and using the chief executive officer (CEO) as a spokesperson. Considering the CEO as corporate spokesperson, Arnold

(1989) states that "the modern CEO has become a public persona – not because he or she wants to be a media star but because the company's survival and success demand effective communication strategies and tactics" (p.335). As a representative of the organisation, the CEO must express concern and optimism when dealing with the media (Ailes, 1988). Even though the relationship between organisations and the media may not be ideal, organisations can work towards a good and effective working relationship between the two parties.

Aside from having a competent spokesperson, good business habits also drive good external communication which is strongly present in successful companies. Therefore, many companies have already integrated communication programmes into their overall organisational goal setting as strategic planning. It would seem that organisations with good external communication would exhibit trait characteristics of visionary companies. These findings are important in that they bring closer associations between good communication and organisational success (performance).

Integration between Internal and External Communication

Most definitions of corporate communication begin with the pursuit of synergy as the most important issue affecting the way in which organisations deploy communication as a management tool. In parallel, Blauw (1994) highlights the concept of an 'integrated approach to all expression', while van Riel (1990) emphasises the need of corporate communication for 'harmonization of all forms of internal and external communication'. Shelby (1993), on the other hand, claims "corporate communication provides an umbrella for a variety of communication forms and formats" (p.255). It encompasses the management's capability to communicate with the internal and external stakeholders, the ability of the organisation to make comprehensive communication plans and to organise the channels and tools either at corporate or product / service level.

The separation between internal and external communication of corporations no longer exists (Cheney and Christensen, 2001; McCallister, 1981). For example, many corporations believe internal publications have to be linked to the overall strategy of corporate communication to ensure the messages to an employee are in line with the external message. Both audiences

(internal and external) are similar in terms of the need for sophisticated communications (Argenti, 1998; Hawabhay *et al.*, 2009) and are interconnected to one another. As Seitel (1992) highlights, positive internal relations is a prelude to the corporation promoting positive external communication. Although the interest on employee communication (internal) have existed for decades, such interest is limited compared with attention given to external communications (Wright, 1995). Therefore, management should devote as much attention to internal stakeholders as they do to external stakeholders (Hawabhay *et al.*, 2009; Wright, 1995).

2.2.3 Dimensionality of Corporate Communication Management (CCM)

The achievement of any modern business depends on what stakeholders think of the company, its products and services and, particularly, of the organisational image and branding. These show the importance of corporate communication and give added momentum (Malmelin, 2006). Therefore, it is important to view communications processes more broadly, involving the entire organisation, and consisting of both internal and external communications with stakeholders in the organisation, and other groups outside the organisation. In this situation, the corporate communication theoretical foundation cuts across disciplines, drawing on language and linguistics, anthropology, sociology, psychology, management, and marketing (Belasen, 2008). Therefore, the process of CCM in organisations can be described as a 'hybrid discipline' between communication and management (Elving, 2012). To be clearer, there are a number of different dimensions of CCM from different perspectives, which are summarised in Table 2.2 below:

Table 2. 2: The dimensions of CCM from different perspectives

Authors	Year	Corporate communication dimensions
Shelby	1993	Public relations (speech writing, press/community relations), public affairs (including lobbying activities), employee, customer, stakeholder communication, corporate policy decision making (issues management) and communications policy and strategy development and implementation.
van Riel	1995	 Management communication (public relations, public affairs, investor relations, labour market communication, corporate advertising, environmental communication and internal communication) Marketing communication (advertising, sales promotion, direct mail, sponsorship and personal sales) Organisational communication (developing organisational vision, organisational leadership, managing process of change and motivating employee)

Argenti	1996	Image and identity, corporate advertising and advocacy, media relations, financial communications, employee relations, community relations and corporate philanthropy, government relations, crisis communication
Kitchen	1997	Public relations, marketing communication and human resources management.
Varey	1997	Public relations, employee communications, personnel, marketing and quality management
Marion	1998	 External relations (press releases and press review, annual reports, public relations, international relations, lobbying, events, partnerships, sponsorship, corporate philanthropy, trade shows and fairs, exhibitions, conferences) Internal communication (information, internal events, co-ordinating internal networks, documentation, translations, publications, photographic and video archives, printed or electronically transmitted news messages) Corporate advertising and visual identity (visual design manuals, denominations, common tools, studies and assessments)
Will et al.,	1999	 Direct external communication (corporate advertising, corporate design and corporate sponsoring) Indirect external communication (media relations, investor relations and government relations) Direct internal communication (employee communication)
Goodman	2000	Public relations, investor relations, employee relations, community relations, media relations, labour relations, government relations, technical communication, training and employee development, marketing communication, management communication, philanthropic activity, crisis and emergency communication, advertising and technology.
Christensen <i>et al.</i> ,	2007	Public relations, marketing, organisational communication, and human resource

Source: Developed for the study

Corporate communication includes CCM dimensions such as *corporate advertising* (Argenti 1996; Goodman, 2000; Will *et al.*, 1999; van Riel, 1995), *public affairs* (Shelby, 1993; van Riel, 1995), *public relations* (Goodman, 2000; Kitchen, 1997; Marion, 1998; Shelby, 1993; van Riel, 1995; Varey, 1997), *corporate philanthropy* (Argenti, 1996; Goodman, 2000; Marion, 1998), *corporate sponsorship* (Marion, 1998; van Riel, 1995; Will *et al.*, 1999), *crisis and emergency communication* (Argenti, 1996; Goodman, 2000), *media relations* (Argenti, 1996; Goodman, 2000; Will *et al.*, 1999), *investor relations/financial communication* (Argenti, 1996; Goodman, 2000; van Riel, 1995; Will *et al.*, 1999) and *employee communication* (Argenti, 1996; Goodman, 2000; Kitchen, 1997; Shelby, 1993; Varey, 1997; Will *et al.*, 1999) in the framework of CCM. However, the applications of CCM frameworks differ depending on the organisation (van Riel, 1995).

According to Goodman (2004), corporate communication is a term used to describe a variety of strategic management and it may include multidisciplinary knowledge depending on the organisation. Based on the Corporate Communication Institute (CCI) Corporate Communication Practice and Trends 2005 Study, Goodman (2006) includes media relations, public relations, crisis communication, executive communication, employee relations and communication policy and strategy as major key functional responsibilities of corporate communications officers. By focusing on particular characteristics of corporate communication, Goodman (2000) highlights the need to make explicit the theoretical, empirical, and practical value of each as well as the need to recognise tradeoffs among academics and practitioners. Furthermore, by segmenting the field into diverse topical areas, he indirectly creates the need for identifying a universal framework that streamlines the field and presents it as a uniform and consistent base of knowledge.

van Riel (1995) developed three clusters of CCM dimensions, which include marketing communication, management communication and organisational communication. Organisational communication has a much broader appeal that includes public relations, public affairs, investor relations, employee relations, corporate advertising, and scanning. Management communication includes traditional aspects of supervision; administration, such as planning, organizing, coordinating, and controlling; and leadership, such as developing shared vision and mobilising support for that vision through trust and empowerment. Marketing communication covers a wide range of external communication that includes advertising, sales promotion, direct mail and sponsorship. Others tend to focus on more external communication that involves public relations and marketing as a key dimension of CCM (Christensen et al., 2007; Kitchen, 1997; Varey, 1997). Employee communication and organisational communications are also highlighted as a part of internal communication in organisations.

Although different corporate communications dimensions are highlighted by prominent scholars in this field, the fundamental importance is that organisations are able to communicate effectively to their stakeholders and gain competitive advantage (van Riel, 1995). One of the key issues when moving towards corporate communication is to develop strong communication activities. The difficulty is to align both internal and external

stakeholders when it involves different types of organisations. The practical approach of corporate communication executives and professionals are operating under the burden of conflicting and often inconsistent expectations coming from various stakeholders. In response to these expectations it is essential for organisations to build a strategic corporate communication approach.

Based on previous contributions, and delimitation of CCM, this research assumes CCM to reflect the following two dimensions as iterated by different scholars: internal communication and external communication. Below are the main dimensions of CCM:

- 1. Corporate advertising (Argenti 1996; Goodman, 2000; van Riel, 1995; Will *et al.*, 1999)
- 2. Marketing communication (Goodman, 2000; Kitchen, 1997; Varey, 1997)
- 3. Public affairs (Shelby, 1993; van Riel, 1995)
- Public relations (Goodman, 2000; Kitchen, 1997; Marion, 1998; Shelby, 1993;
 van Riel, 1995; Varey, 1997)
- 5. Corporate philanthropy (Argenti, 1996; Goodman, 2000; Marion, 1998)
- 6. Corporate sponsorship (Marion, 1998; van Riel, 1995; Will et al., 1999)
- 7. Crisis and emergency communication (Argenti, 1996; Goodman, 2000)
- 8. Media relations (Argenti, 1996; Goodman, 2000; Will et al., 1999)
- 9. Investor relations/financial communication (Argenti, 1996; Goodman, 2000; van Riel, 1995; Will *et al.*, 1999)
- 10. Employee communication (Argenti, 1996; Goodman, 2000; Kitchen, 1997; Shelby, 1993; Varey, 1997; Will *et al.*, 1999)
- 11. Organisational communication, (Goodman, 2000; van Riel, 1995).

However, the above list is too broad and there are overlaps within the dimension. Table 2.3 provides an overview of these overlapping dimensions. In order to discuss the dimensionality of CCM, this has been narrowed down six major categories which, it is argued, are more relevant in the practice of CCM. Even though some of the dimensions are dropped due to redundancy, particular items are considered and incorporated into other related dimensions. For the next section, six categories of corporate communication are discussed further:

corporate advertising, corporate affairs, public relations, media relations, investor relations and employee communications.

Table 2. 3: The overlapping dimensions of corporate communication

Dimensions	Overlapping dimensions	References	
Corporate advertising	Marketing communication	 Corporate advertising is a component of marketing communication strategy (Patti and McDonald, 1985) Corporate advertising should be an integral component of marketing communication programme (Crane, 1990) 	
Public relations	Corporate philanthropy	 Majorities of businesses in the three samples located responsibility for corporate philanthropy in a marketing or public relations department (Bennett, 1998) Corporations consider philanthropy a form of public relations or advertising, and then there will be a predictable relationship between changes in corporate gifts and advertising. (Levy and Shatto, 1978) 	
	Corporate Sponsorship	 Sponsorship has been included under the heading of marketing PR primarily because this is where many companies place it in terms of describing the communication mix (Kitchen, 1993) Arts sponsors more commonly centre the sponsorship function in the PR department (Quester and Thompsom, 2001) 	
	Crisis and emergency communication	The relational perspective has been explored in the context of various public relations functions, including crisis management (Ledingham, 2003)	
Employee communication	Organisational communication	The study of communication within organisations fits better as a subset of corporate communication under the sub function of employee communication (Argenti, 1996)	

Source: Developed for the study

Corporate Advertising

Over the past decade, corporate advertising has received attention (Crane, 1990). Numerous case studies and strategies have been written to describe the best way corporate advertising can facilitate positive public perception in business (Schumann *et al.*, 1991). For example, as paid messages communicated via various media designed to influence a consumer's perception towards the company and its product (Aaker, 1996) thereby creating and encouraging a positive attitude among customers, suppliers, potential investors, authorities and opinion leaders towards organisations (Well, 1989).

The objectives of corporate advertising can be seen in many ways. First, according to Schumann *et al.* (1991), it is used by companies to increase the value of stock and gain

stockholder confidence during a corporate takeover climate. Second, corporate advertising helps clarify a company's identity to relevant stakeholders in the issues of divesture, deregulation, merger and acquisition (Patti and McDonald, 1985). Third, recruitment research has found that corporate advertising (Cable *et al.*, 2000) affects job seekers' perceptions toward organisations. Overall corporate advertising is an important tool for organisations to increase their reputation.

According to Bovee (1992), advertising has various functions such as to report a company's performance, to explain the company's situation in the competitive market, to announce organisational structure changes, to increase share price and to avoid communication problems with stakeholders. In essence, to support such functions, print and electronic media can be used to remind the public about the organisation by positioning its good image in the public's consciousness, and maintaining public trust (Gray, 1986).

In relation to corporate communication, many scholars believe that corporate advertising is part of the corporate communication function (Argenti 1996; Goodman, 2000; van Riel, 1995). This statement has been confirmed based on the ANA study in 1998 (see Schumann *et al.*, 1991), which reports that 38 percent of respondents replied the responsibility of corporate advertising lay with corporate communication, 34 percent viewed it as a function of the marketing department, 26 percent categorised it under public relations functions and only two percent put it as an investor relations responsibility. These findings confirm the functions of corporate communication in managing corporate advertising for organisations.

Corporate advertising, within the study reported on in this dissertation, is discussed from functions such as managing corporate identity (Melewar and Jenkins, 2000; Schumann *et al.*, 1991), brand (Balmer, 1995; Gray, 1986; Melewar and Storrie, 2001), corporate visual identity (Melewar and Storrie, 2001; Van Heerden and Puth, 1995) and content (Askehave and Swales, 2001; Newsom and Carrell, 2001; Osman, 2008). The next sections discuss the details of every component involved in corporate advertising functions.

Corporate identity

According to Van Riel (1997), a definition of corporate identity is difficult to obtain, and lacks consensus as to basic conceptualisation and definition (Balmer and Wilkinson, 1991). There are various definitions of corporate identity. Bernstein (1984), for example, defines corporate identity as the total number of actions chosen by the company to be known by the public. Olins (1989) adds that corporate identity involves a wide range of disciplines, including management, communication and behaviour. In other perspectives, Gunning (2003), defines corporate identity as the forms that can be seen in the physical manifestation of an organisation that includes offices, showrooms, employee uniforms, company vans, letterheads, and logos amongst others. Melewar and Jenkins (2000) developed a model of a more comprehensive corporate identity, consisting of communication and visual identity, behaviour, corporate culture, market conditions, organisations, products and services in determining an organisation's image. This model involves all sources of identity, regardless of physical form or in the form of an abstract, and can serve as a benchmark; the strength of the image is owned by an organisation.

Corporate identity is an important element in determining the status of a company in the market. For example, corporate identity will create an impression or perception to ensure a corporate image is accepted by the public through corporate communication activities (Dowling, 2001). To achieve this goal, corporate communications are used to disseminate the corporate messages "from both official and informal sources, through a variety of media, by which the company conveys its identity to its multiple audiences or stakeholders" (Gray and Balmer, 1998, p.696). Thus, the role of corporate communication is formally used to convey the organisation's mission and philosophy to the various stakeholders (Otubanjo and Melewar, 2007) and also helps to change the corporate culture (van Rekom, 1997).

Brand identity / brand image

Branding strategy is often used by businesses to facilitate promotional activities through the company's image advertising in media (Melewar and Storrie, 2001). In essence, the use of the brand starts as a trademark before it becomes the corporate brand (Balmer, 1995) because

it focuses more on the actual situation of the organisation. The importance of the brand is indicated by the Boston Consulting Survey, who found 19 popular brands in 1925were still popular brands after 60 years (Millgan, 1995). This proves that branding is very important in the on-going corporate image. Thus, the success of a brand can only be enjoyed after a few years, and this success can only be achieved through strategic planning (Hankinson and Hankinson, 1999).

Prior to portraying a good brand image, the development of brand identity is important. Brand identity includes visual, emotional, rational and cultural images that are associated by consumers with a company or product. For instance, Mangini (2002) indicates the company's brand identity, including name, logo, placement, brand associations and brand personality.

The corporate brand is considered as a 'vehicle' that sends a signal to the public. Therefore, every signal that comes out is some element of the company (brand identity), and will affect the public image of the brand (brand image). To make it a success, companies need to plan systematically, because signals sent to the public are rendered by their behaviour, communication and symbolism (Birkigt and Stadler, 1998; Maathuis, 1999). Corporate branding works as a communication tool in forming the symbol. However, its success depends on the behaviour of companies, which develop a reputation through their products and services, financial position, work environment, leadership, social responsibility and sense of appeal. In this study, we can deduce that corporate branding is part of an organisation's corporate identity, which is affected by the perception of consumers who will form a brand image in their minds.

Corporate visual identity

The main concepts of the identity of a company are highlighted via the logo, design of buildings, appearance of employees and administration. Visual identity is always used to promote a professional identity and to convey strategic messages through an organisation's mission and vision (Balmer, 1995) to stakeholders.

Gregory (1991) indicates the basis of visual identity is the name and logo, while Hosmer (1999) refers to it as a graphic expression. Many business organisations refer to the visual identity as a logo, brochure, forms, advertising, office location and website. However, a subcomponent is its subjective justification; but many scholars refer to the visual identity of any organisation which can be seen visually (Melewar and Storrie, 2001). The study conducted by Van Heerden and Puth (1995), found that visual design and behaviour can distinguish the corporate image of banking institutions in South Africa. The respondents choose the best bank according to the logo, which shows that the bank's image can be formed through a logo. Therefore, the logo, corporate name and other visual identity must have their own characteristics by which they can project the company's identification, distinction and differentiation (He and Balmer, 2005) among stakeholders and important channels in corporate communication activities.

Content for corporate advertising

Corporate business commonly publishes informative or promotional literature to inform an organisation's new development to the public (Osman, 2008). The publication can be monthly or annually, and it is also used to introduce new products or services. The publication includes leaflets, brochures or any promotion material. Therefore, the content of these publications should be created and developed by corporate communication practitioners. For example, a brochure which is one of the corporate advertising tools should be produced by PR practitioners (the corporate communication function) rather than advertising practitioners (Newsom and Carrell, 2001). Producing a brochure involves the principle of corporate writing (Treadwell and Treadwell, 2000) which is basically a PR skill.

In practice, any publication produced by the Corporate Communications or PR Department is referred to as a corporate genre (Osman, 2008). Richard *et al.* (2000) categorise corporate brochures as informative brochures which comprise related information about a company. Its function is to purposely communicate and promote the company (Askehave and Swales, 2001) and establish long-lasting business relationships in the current industrial market.

Public Affairs

Armstrong (1981) explains that the formation of a public affairs department in the organisation is to build public awareness of an issue and to influence society, particularly community leaders or political leaders. MacMillan (1991), describes public affairs as enabling businesses and governments to meet their objectives with the benefit of their stakeholders and that, in the long term, it can optimise the company's relationship with the government. In addition, Harris and Moss (2001, p.103) and Cutlip *et al.* (1994, p.15) add that "public affairs focuses primarily on those stakeholder relationships concerned with public issues and government relations". More definition of public affairs, as reviewed by Fleisher and Blair (1999), are illustrated in the table below:

Table 2. 4: Multiple definitions of public affairs

Author	Year	Definition	
Gollner	1983	A process by which any organisation monitors, anticipates and manages its relations with social and political forces, issues and groups that shape the organisation's operations and environments	
Post and Kelly	1988	It serves as a window: Looking out, the organisation can observe the changing environment. Looking in, the stakeholders in that environment can observe, try to understand, and interact with the organisation.	
Fleisher	1994	Managing relationships between organisations and stakeholders/issues in the public policy (for example, non-market or socio-political) environment.	
Carroll	1996	An umbrella term referring to how a firm develops and implements its enterprise-level strategy ('what do we stand for?'), its corporate public policy (a more specific posture on the public, social or stakeholder environment or specific issues within this environment), its public affairs strategy (issues and crisis management most important here), and how all these processes may be embraced within a public affairs function (a department).	
Hoewing	1996	The name for the integrated department combining all, or virtually all, external non commercial activities of the business world.	

Source: Fleisher and Blair (1999)

Based on the above definition, public affairs contain an element of 'managing relationships with stakeholders'. Fleisher (1999) believes the management of relationships between an

organisation and its stakeholders can "build a mutual understanding or stakeholder harmonization" (p.280). Therefore, public affairs include more extensive strategic management function components such as business and society, corporate social responsibility and ethics, strategy and management, issues management and public policy management (McGrath *et al.*, 2010). In addition, Harris (1999) indicates the importance of public affairs work in government regulated markets that involve the CEO of the company in direct proportion to its strategic business. Some call these government relations (Mack, 1997; Marcus and Irion, 1987; Post *et al.*, 1982).

In relation to corporate communication, Fleisher (2002) suggests that both corporate communications and public relations have to recognise the communication-oriented aspects of the corporate public affairs field, such as community relations, investor/shareholder relations and integrated marketing (Fleisher, 2002, p.439). There are three main components in public affairs to be highlighted, including issues management (Carroll, 1996; Fleisher and Blair, 1999; Marcus and Irion, 1987; McGrath *et al.*, 2010), industry regulation compliance (Crable and Vibbert, 1985; Fleisher, 2007; Harris, 1999) and public policy environment (Carroll, 1996; Fleisher and Blair, 1999; McGrath *et al.*, 2010).

Issues management

Issues management is a significant theme found as a core element of the public affairs function (Carroll, 1996; Fleisher and Blair, 1999; Marcus and Irion, 1987; McGrath *et al.*, 2010) which involves monitoring an external environment and managing issues that occur in the organisation's relations with political, societal and economic forces. The ultimate goal for the relationship is to promote a positive environment, in which the organisation can achieve its objectives.

Issues management is generally acknowledged as contributing to strategic planning, as a number of scholars suggest "enhancing the public affairs relationship is an important step in improving the overall responsiveness of the enterprise to a changing environment" (Post *et al.*, 1982, p.15). Therefore, the expertise should understand the process of public and governmental policy and, more critically, any meaningful corporate engagement in such

processes (McGrath *et al.*, 2010). Indeed, it may be in the area of issues management that public affairs make its most vital strategic contribution to organisational strategy and goal accomplishment.

Industry regulations compliance

The significance of public affairs work has, in government regulated markets, become quite clear, owing to the industrialised and developing world, and social and political turbulence. Therefore, many researchers in public affairs (Crable and Vibbert, 1985; Fleisher, 2007; Harris, 1999) believe one of the main roles of public affairs is to ensure their activities comply with industry regulations. Currently, public affairs departments establish increasing heights of skill in dealing with federal legislative and regulatory matters. As indicated by Post *et al.*, (1982), "the changing 'frontier' of the field has become legislative and regulatory relations at the state and local level" (p.15).

Nevertheless, there are varying degrees of regulation in the different industries. For example, utility industries are heavily regulated, banks have a lesser degree of regulation and the chemical industry regulates aspects such as pollution, work safety and environmental issues (Post *et al.*, 1982). Hence, public affairs experts should understand their industry before taking any action, since government regulation varies from one to another.

Public policy environment

Fleisher (2007) sees understanding local public policy institutions and processes as one of the minimum competencies and knowledge for public affairs practitioners. According to Jones and Chase (1979) public policy is not the exclusive domain of government, but exists because of the interaction between public and private points of view. Decision making in the public policy process can be grouped into three: citizens, business and government. All are interrelated and interdependent, and no one can make decisions independently (Jones and Chase, 1979). Therefore, the corporation (business entity) has every moral and legal right to take part in the formation of every public policy, and not simply react, or respond to the

policies planned by government. These should be addressed by the public affairs function in order to meet organisational objectives.

The corporation must be aware that government intervention in public policy, supported by the public, will diminish in the foreseeable future. In this case, top management should anticipate and respond to the public policy requirement for long-term institutionalisation and allow sufficient time for analysis and corporate response. Moreover, organisations should formalise public affairs goals at the board of directors level, to address social issues, urban affairs, corporate governance and social responsibility. Hence, the existence of a higher degree of attention and awareness of public affairs issues from senior management will give them more regular exposure to the issues (McGrath *et al.*, 2010).

Public Relations

Public relations are the planned promotional activities to build the reputation of an individual or institution. Some people may define public relations as an effort to strengthen and maintain the company's image among the public. A number of Western scholars have also contributed to the idea and definition of public relations. In 1976, Harlow collected 472 versions of the definition of public relations, written from 1900 to 1976, to identify and classify some of the key elements of the main ideas. After analysis, he developed a definition of public relations that includes both conceptual and operational elements.

The definition of public relations promoted good relations between the organisation and the public. For example, Aspley (1961) defined public relations as a means to foster good relations and public trust and confidence in trade or against a particular industry, the purpose of or against a person. Schoenfeld (1963) stressed planned policies and practices used by an organisation with the aim of creating a suitable environment to achieve the goals of the organisation. The Institute of Public Relations of America (IPRA) stipulates that 'the practice of public relations is a planned and ongoing effort to strengthen and maintain goodwill and mutual understanding between an organisation and its public.'

The first World Assembly of the Public Relations Association, held in Mexico in 1978, was the first World Conference on Public Relations, defining public relations as "the art and

social science of analysing trends, predicting their consequences, counselling organisational leaders, and implementing planned programmes of action, which will serve both the organisation and the public interest" (Zhoa, 1999). This shows that public relations work is an important tool to enable an organisation to communicate with their stakeholders. Table 2.5 below shows various definitions and concepts public relations has taken for the last 30 years.

Table 2. 5: Multiple definitions of public relations

Author	Year	Definition
Grunig and Hunt	1984	Managing communication between an organisation and its public.
Cutlip et al.,	1985	The management function that establishes and maintains mutually beneficial relationships between an organisation and public on whom its success or failure depends.
White and Mazur	1994	Its goal is to influence (through dialogue) the behaviour of groups of people in relation to one another.
Newsom et al.,	1996	The art and social science of analysing trends, predicting their consequences, counselling organisational leaders and implementing planned programmes of action which will serve both the organisation and the public interest.
Baskin et al.,	1997	The management function that helps achieve organisational objectives defines philosophy and facilitates organisational change. Public relations practitioners communicate with all relevant internal and external public to develop positive relationships and to create consistency between organisational goals and societal expectations.

Source: Developed for the study

Functions of public relations in management have long been recognised (Gordon, 1997; Grunig *et al.*, 1997). Meanwhile, definitions based on management have been designed to emphasise the role of public relations. Baskin *et al.* (1997) state public relations management functions help to achieve organisational objectives identify philosophy and provide a change in the organisation. It helps to develop a positive and consistent relationship between the goals of the organisation with community expectations. The success of this relationship depends on both parties (Cutlip *et al.*, 2000).

Furthermore, the relationship between public relations and corporate communication has been discussed (Argenti, 1996; Belasen, 2008; Cornelissen, 2008; van Riel, 1995) and details on this matter are presented in Section 2.3. Therefore, the seven main items included in public relations are company publications (Argenti and Forman, 2004; Argenti, 1998b; Broom, 1982); regular communication with stakeholders (Argenti, 1998b; Newsom *et al.*, 2004); corporate social responsibility (Bowen, 1953; Carroll, 1991; Carroll, 1999; Walton, 1967); content for electronic publication (Pearson, 1992); communication with external stakeholders (Argenti, 2007; Grunig, 1992; Kotter, 1979; Pharr, 1990); developing the company communication policy (Broom, 1982; Gilsdorf, 1998; Toth *et al.*, 1998); and speech writing, translations and documentation process (Baskin, 1974; Hutton *et al.*, 2001).

Company publications

Public relations professionals always try to meet and interact with large groups of people (Cutlip *et al.*, 2000). In this activity, print materials are an important tool; for example, printed materials, including reports, press releases, brochures, speeches, scripts, newsletters, product information and technical material, trade magazines, employee publications, shareholder reports, articles, and other related to communications management. These materials serve as a medium of communication for both an internal and external public. In communicating with the employee (internal public) most companies use newsletters (Argenti, 1998b) and other printed material such as brochures and reports for the external public. Hence, clear information and good writing style are important for public relations work to create a corporate message. Company publications are important, as demonstrated in Broom's (1982) survey on PR practitioner activities in America that include the statement 'I produce brochures, pamphlets and other publications'.

Essentially, the purpose of a publication is to foster a spirit of cooperation (goodwill), prestige and readers understanding of the organisation. In addition the publications are used to disseminate the latest information about new products or services offered.

Regular communication with stakeholders

According to Newsom *et al.* (2004), terminology regarding stakeholders will bring a wider concept of public relations because it has expectations for the organisation and the organisation has some degree of accountability. Stakeholders of the organisation include employees, suppliers, customers, governments, investors, local communities and specific groups that will be affected by any actions taken by the organisation.

Organisations need to establish a healthy relationship by accepting the existence of stakeholders as part of an organisation's environment. The practice of healthy public relations is also needed to deal with environmental issues that may be raised by the public. During a crisis, for instance, effective communication with the stakeholder is an important component in organisations' environmental management strategies (Argenti, 1998b). Therefore, organisations should be prepared to risk a communication approach to avoid delays in the programme, legal action and negative coverage from the media. Where serious issues are at stake, stakeholders are not only asked for information regarding environmental management practices, but want the right to be involved in decision-making on environmental issues that will affect them.

Corporate social responsibility (CSR)

The earliest definition of CSR comes from Bowen (1953) regarding the initial definition of the social responsibilities of businessmen: "It refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action, which are desirable in terms of the objectives and values of our society" (p.6). Walton (1967) defines CSR as "the intimacy of the relationships between the corporation and society and realises that such relationships must be kept in mind by top managers as the corporation and the related groups pursue their respective goals" (p.18). Furthermore, Carroll (1991) states in more pragmatic and managerial terms that "CSR firm should strive to make a profit, obey the law, be ethical, and be a good corporate citizen" (p.43). In short, the definition of CSR can be concluded as an organisational effort to build relationships with society through activities that can benefit both parties.

The concept and definition of CSR have a long and diverse history in the literature, and it remains an important part of business language and practice. In today's business community, it is an essential foundation for many other theories, and is continually consistent with what the public expects (Carroll, 1999). More than this, it may form a new realm in thinking about business responsibility to the community stakeholders, especially at the global level, and in new and emerging technologies, fields and commercial applications. In this context, it shows that the concept of CSR has a bright future, because at its core, it addresses and captures the most important concerns of business and civil society about the relationship (Carroll, 1999). The main reason for public relations practice is to increase social organisation and specialisation in society generally. As outcomes, CSR will contribute to the return on investment (Karake, 1998) and business performance (Zairi, 2000; Zairi and Peters, 2002) of the organisations.

Content for electronic publication

Public to corporate organisations need accurate information and, most importantly, a high level of reliability. Public such as customers, investors, shareholders and the media want information presented in a clear manner, in which the dissemination of information will reflect the image of a company. Good presentation style can affect image and reputation. One of the most important elements in public relations practice is the use of technology advancement, especially in mass communication techniques (Pearson, 1992) which can help to deliver the message quickly (Spaul, 1997). Therefore, communication technology has become an important medium of communication which is without the limits of time and national boundaries. Interesting features of this could make it more desirable and have a big impact on communication efficiency. Therefore, companies should strive to present the best possible corporate information in electronic publications to highlight a good reputation.

Communication with external stakeholders

In business, organisations cannot exist independently, but somehow depend to a certain degree, and in some element, on their external environment (Argenti, 2007). Some of the

resources needed are controlled by others, such as labour, land, capital, information or specific products or services (Kotter, 1979) that can threaten the survival of the organisations (Pfeffer and Salancik, 1978). As Dowling (1990) indicates, stakeholders have become more demanding, more sceptical and more diverse. As a result, the challenges for organisations are to communicate with a vast number of external stakeholders through an effective public relations programme. Pharr (1990) suggests that organisations are "understanding particular interest groups, working effectively with the media those groups trust, and devising a variety of messages to reach different audiences" (p.19).In short, the challenge of a public relations department is to monitor, strategically, the external stakeholder with whom they can affect the success and the survival of the organisation (Grunig, 1992).

Developing a company communications policy

Public relations is a strategic management (Cutlip *et al.*, 1985) where the communication policy is important to promote, regulate or proscribe communication behaviour (verbal or non verbal) of organisation members (Gilsdorf, 1992). The communication policy, and planning, is essential for organisations (Bloom, 1983; Bloom and Lill, 1983; Broom, 1982; Levy, 1986; Sharpe, 1986; Toth *et al.*, 1998). According to Ditlevsen and Kastberg (2007), "in communication policy, the organisation expresses its attitudes towards how its employees should communicate internally and externally" (p.16). For instance, during critical times, especially when turnover and turbulence are high, employees' communication activities can affect the success of the firm, and they need guidance through the written policy. Hence, an effective policy can help organisations to support and make communications function more clearly (Gilsdorf, 1992). It can be done by putting communication as a systematically planned activity at every level of the organisation (Laurinaitis and D'Aprix, 1984).

Speech writing, translations and documentation process

Writing skill is fundamental and essential for PR practitioners, because PR is rooted in journalism. Writing skill is needed in one PR function, speech writing (Baskin, 1974; Hutton *et al.*, 2001). Hutton *et al.* (2001) also find speech writing among the most common functions included in corporate communication budgets.

Media Relations

Media relations are a deliberate effort to manage, build and maintain the relationship between organisations and the media (Argenti, 1998; Cutlip *et al.*, 2000) either verbally or through other media components (Caywood, 1997). In general, the term media is derived from 'medium', which means an intermediary and it can be defined as equipment used to deliver messages to stakeholders.

The term medium also refers to a form of mass communication such as newspapers, magazines and radio. Media can be divided into three forms: print, electronic and interactive. Naturally, corporate communication has a very close relationship with print and electronic media. The strong argument for the relationship is because media is a simple mediator and cost efficient in cascading the organisation's information to the public (Cutlip *et al.*, 2000). Media relations help to support the promotion of the corporate identity and image of the organisation.

The practice of media relations is the most important element that enables the organisation's message to be delivered to target audiences through established relationships with the media and at the same time meets the requirements of the media work. Successful media relations can increase the organisation's efficiency (Cutlip *et al.*, 2000). Furthermore, media relations can bring good conditions in building a harmonious and meaningful relationship. This relationship can help an organisation to create a network with internal and external stakeholders and thus, can enhance a reputation and public confidence in their products and services. Generally, the relationship between the organisation and the media is mutual. Therefore, the establishment of a good relationship will have a positive impact in overall corporate activity (White and Mazur, 1995) such as performance.

Corporate communication manages functions of media relations such as awareness and literacy programmes (Aufderheide, 1993; Lewis and Jhally, 1998), addressing media needs (Cutlip *et al.*, 2000; Ruotolo, 1988), archiving photographs and videos (Afonso and Miguel, 2006; Magnet, 2002) and press releases and media conferences (Argenti, 1998; Freedman, 2003; Jefkins, 1988).

Awareness and literacy programme

Corporate interdependence to the media increases as a result of today's business environment. Hence, Jefkins (1988) believes that media can bring the organisation to a better position through harmony and meaningful relations. Hence, media awareness and literacy programmes organised by the organisations are important activities in media relations. Lewis and Jhally (1998) indicate that media literacy "is about more than the analysis of message, it is about an awareness of why those messages are there" (p.109). According to Aufderheide (1993) and Christ and Potter (1998), media literacy can be defined as the ability to access, analyse, evaluate, and communicate messages in a wide variety of forms, as well as help the organisation become more effective in their operations. Moreover, some organisations exist in very complex industries which are very difficult to understand, such as the chemical and petroleum industries. Therefore, media awareness and literacy by the organisation will make them (reporter and consumer) more clear and better able understand the particular issues.

Addressing media needs

Ruotolo (1988) states public relations practitioners gain cooperation with the media by giving them information containing elements of news value, which are interesting, appropriate to the time and ready for use. Reporters also easily work with those who are willing to attend to reporters outside office hours. Thus, good public relations practitioners will always work outside office hours to provide services to the media who want information about their organisation.

Cutlip *et al.* (2000) indicates that a very effective policy when dealing with the media is to be honest. For instance, public relations practitioners need to keep their credibility when presenting news to the media. As a result, this will create a climate of mutual trust between reporter and public relations practitioners. Therefore, it is important for public relations practitioners to deliver the right information and news to the media. One of the basic things that need to be addressed by public relations practitioners is to avoid presenting any news on

certain media agencies. The best way to prevent this is to communicate to all media as soon as possible, simultaneously (Cutlip *et al.*, 2000).

Archiving photographs and videos

Internet technology has changed the way that organisations communicate to their stakeholders. Afonso and Miguel (2006) found that the internet offers many possibilities for external websites, and also corporate intranets in corporate communication. For external stakeholders such as media, many organisations develop a specific section of their website to communicate with the media in 'online press rooms'. From this section, the media and other stakeholders can obtain information regarding the organisations such as company information, photographs and videos. This section is important, because 70 percent of journalists are searching information from company websites for breaking stories or features (Magnet, 2002). Undoubtedly, a financial statement, downloadable photographs, executive biography and corporate profile are of interest to journalists to access (Callison, 2003). In fact, the main reasons journalists visit company websites is to download images to use in their stories (Nielsen Norman Group, 2001). Therefore, archiving company material, including photographs and videos, is important in media relations activities.

Press releases and media conferences

Nolte and Wilcox (1984) define a press release as a piece of paper containing the information desired by the sender (organisation) to be published by the media. Therefore, the information submitted must be complete and ensure a press release is sent with the news (newsworthy). Jefkins (1988) believes that not all sections or items desired by the organisation will be included in the media. In general, journalists will rewrite a story to be congruent with their needs, which is more concerned with writing a fact. However, not all stories submitted will be published by the media. As Argenti (1998) explains, since the year 1990, the media only use 10 percent of the news conveyed by public relations practitioners in their report. This occurs because the media can obtain information through other sources, such as the internet. Thus, PR practitioners need to think through effective strategies to sustain a good relationship

with the media. For example, press releases arriving just in time with news values, useful quotes and photos (Freedman, 2003).

Investor Relations

Investor relations form part of strategic management responsibility, which involves the disciplines of finance, communication and marketing (NIRI, 2010). It includes managing content and information flow from the financial sector to other sectors to maximise relationships. In other words, three important disciplines need to be integrated to make investor relations successful. In this integration, finance departments prepare and provide financial information, and communication will determine the best way the information can be spread to various stakeholders. Common investor relations information includes the corporate report, interim report and annual financial report (Gunther and Otterbein, 1996). Meanwhile, marketing plays a strategic function, providing a potential and present investor with an accurate portrayal of the company's prospects and performance (Brown, 1994).

Many believe that investor relations are part of the communications function (for example Baskin and Aronoff, 1992; Center and Jackson, 1995; Cutlip *et al.*, 1994; Grunig and Hunt, 1984; Newsom *et al.*, 1996; Wilcox *et al.*, 1995). They indicate investor relations as a main component in corporate public relations. For example, Cutlip *et al.*, (1994) define investor relations as "the specialised part of corporate public relations that build and maintain mutually beneficial relationships with shareholders and others in the financial community" (p.19). It is important to build and maintain the relationship for the mutual benefit of both stakeholder and other financial community in maximising the market value.

Conversely, it is argued that investor relations should be considered within finance and public relations (Hong and Ki, 2007). This argument is based on the source of the finance message within an organisation belonging to the finance department and financial executive mostly reporting investor relations affairs (McGrath, 1974). The main reason that investor relations affairs are located under the finance department is because of their 'nature' to be closer to the business area (Hong and Ki, 2007). In addition, research conducted by Forman and Argenti (2005) also found an investor relations sub-function is a separate function from corporate communication and tied to the CFO which is under the finance department.

However, public relations practitioners also seek to be a part of investor relations, because few have been trained and are experienced in dealing with corporate finance, management and law (Petersen and Martin, 1996). According to Dark (1988), many of the ex-specialties of investor relations in the UK are ex-journalists who moved to corporate finance where journalism is a root of modern public relations. Investor relations practitioners come from a finance, public relations or corporate communications background (Nair, 2003).

The role of corporate communication with an investor has developed into a corporate strategy in communicating the financial information to investors and potential investors (Ellis, 1985; Marston and Staker, 2001) where the information given will help them (investor) to assess the value of a company (Marston, 1996). Successful corporate strategy involves corporate communication on identifying, establishing and maintaining long-term relations with the stakeholder (Dolphin, 2004). Its strong strategic role will enhance investor relations activities which it is a part of an overall integrated corporate communications message (Gregory, 1997). As an outcome, a positive reputation is created via investor relations activities that can have an impact on reducing the degree of negative perception of a shareholder towards the firm (Srivastava et al., 1997). The investor relations activities managed by corporate communication includes an AGM and financial result announcements (Brennan and Kelly, 2000; Gunther and Otterbein, 1996; Marston, 1996), annual report and quarterly financial report (Hedlin, 1999; Roop and Lee, 1988; Rao and Sivakumar, 1999), investor relations programme (Ellis, 1985; Marston, 1996; Nichols, 1989) and creating a better context regarding the company's financial performance (Holland, 1997; Marston, 1996; Rao and Sivakumar, 1999).

AGM and financial results announcement

One of the functions of investor relations is the announcement of financial results for every quarter, and annually. This information will help the financial community and investors to decide on their investments (Marston, 1996b). The financial information transmitted by the companies to the investors consists of two elements: (1) formal financial reporting; and (2) informal voluntary disclosure of corporate information (Gunther and Otterbein, 1996).

The formal element is required by law (for example, Security Commission Act) and includes publishing the annual financial report and calling for annual general meetings of shareholders (Brennan and Kelly, 2000; Gunther and Otterbein, 1996) declaration of dividends, stock splits, and changes in corporate officers (Rao and Sivakumar, 1999). In addition, formal elements may also include the interim report, press and financial analyst conferences, round table and one-on-one discussions as well as telephone conference calls (Gunther and Otterbein, 1996). Meanwhile, informal elements of voluntary disclosure of corporate information are corporate earnings restatements. Thus, the announcement made by the company must be fair and equal, because good or bad news will have an impact on investment decisions (Brown, 1994).

In terms of spreading the financial information to the investor, the companies can use a multichannel approach. Traditionally, financial information is communicated via financial reports, press releases, road shows and analyst meetings (Geering *et al.*, 2003). However, the fastest developing communication channel, the internet, also increases the instrument of disseminating a financial result to the investor (Spaul, 1997). For instance, a corporation uses its website as a "platform to present financial data, especially annual reports, databases on press releases and other company-specific information" (Deller *et al.*, 1999, p.351).

Annual report and quarterly financial report preparation

Many countries have regulated the basic form and content of financial reporting. In Sweden for example, all the joint-stock companies are required by law to produce an annual report, and this can be accessed by all stockholders (Hedlin, 1999). For companies listed on the stock exchange, it is compulsory to follow the general rule of corporate reporting. This consists of the proxy statements to stockholders and provision of regular annual reports under the jurisdiction of investor relations and includes fostering communications between the board and stockholders on matters of corporate governance (Rao and Sivakumar, 1999).

Although the financial information is recorded and reported by the finance expert, the investor relations officer must take a part in preparing the financial annual report before it

goes public. Elements of communication should be injected into the annual report to ensure the message is clearly stated. For example, in the quarterly and annual financial report, the company may introduce the acquisition strategy, product offerings and strategy to improve the return to shareholders (Roop and Lee, 1988).

Investor relations programme

Studies of investor relations provide many articles that discuss how a corporation can develop an effective investor relations programme (Nichols, 1989). Its efficiency is important for the company to increase the understanding, gain appropriate recognition and credibility within the investor and financial community for its capabilities and long-term prospects (Ellis, 1985). The objective of the investor relations programme is to provide the right picture of the company's operational history and the prospect of the company's development. Therefore, the senior management and the board have an important part to play in an effective programme of financial communication (Marston, 1996). They should communicate how the company operates in order to help the investor community make investment decisions.

Furthermore, continuous and persistent cascading information to the investor is needed, even in times of economic downturn (Nair, 2003). In other words, the real value of a company can be communicated at all times. This action will differentiate the company's investor relations programme from its rivals, thereby giving the impression the company is more proactive and transparent. It is based on the market efficiency hypothesis; the market value of the company has a significant impact on spreading 'new' information to the market (Elton and Gruber, 1995).

Creation of a positive context and better perspective on financial data

In the investor community, financial information is essential for them to decide on capital investment (Deller *et al.*, 1999). Simultaneously, the company should ensure the investor knows the latest information in order to give a fair valuation as to the company's security. For example, the weak performance of the company may create a need for the company to justify its performance to investors and analysts (Rao and Sivakumar, 1999). Therefore,

investor relations experts are responsible for increasing the confidence levels of investors by making the company shares more attractive (Marston, 1996a).

In order to create a positive perspective of company share performance, the investor relations executive must ensure the value of the company's stock reflects a realistic prospect for the organisation (Rao and Sivakumar, 1999). They are also responsible to manage the analysts' expectations, and the investor's misconception regarding the company performance. As Rao and Sivakumar (1999) indicate, the most challenging part for the investor relations executive is to "understand the assumptions driving the financial model used by financial analysts, and to influence those assumptions to ensure a realistic assessment of the organisation" (p.29).

Employee Communication

In daily business, management will always be involved on an ongoing basis to deliver and disseminate information to specific groups within an organisation. Therefore, the management of the organisations should seriously consider which delivery method is the most effective to each member of the organisation. Based on this phenomenon, scholars have classified the methods of management in relation to their employees. This method is known as employee communication (Argenti, 1996). In general, the fields of employee communication management functions are not the sole responsibility of a human resource management department, but are also the responsibility of corporate communications in an organisation. As explained by Argenti (1996) the majority of Fortune 500 corporations manage their employee issues through a corporate communications department, rather than a human resource department.

In general, employee communication can be defined as a continuous effort to disseminate information related to the organisation to the entire structure of an organisation (Daniels *et al.*, 1997). This working relationship is often associated with an organisation's internal communications. A study conducted by Williams (1978) among organisations in Canada, and the United States, demonstrates that employee communications are the most important issue in their management plan, and contribute to organisational effectiveness and productivity.

Byers (1998) states that employee communication occurs because the management would like to state their views and objectives of any matters affecting the organisation.

In relation to corporate communication, Argenti (1998b) states that employee communications functions should be under the human resource department, where the welfare of the employee is served. However, his current study finds 80 percent of major companies in the United States placed the responsibility of employee communications under the supervision of the corporate communications function. Three items of employee communication are stressed within the literature: communications training (Freitag and Picherit-Duthler, 2004; Tavemier, 1980; Tubbs and Widgery, 1978); management of organisational change through dialogue (Daniels *et al.*, 1997; Fisher, 1999); and internal communication (Daniels *et al.*, 1997; Howard, 1985).

Communications training

Many confirm the positive effects of communications training programmes on organisational effectiveness (Tavemier, 1980; Tubbs and Widgery, 1978). Communications training is a part of employee communication responsibility to ensure the organisation message successfully flows to their internal public. Training should focus on media usage, intercultural communication and interpersonal communication.

Typically, HR managers have a lack of extensive professional communication training and are not prepared to make use of emergent media channels that are suitable for segmented internal public (Freitag and Picherit-Duthler, 2004). In fact, most of the communication materials are transferred from outside without being filtered by the HR managers. Therefore, knowledge about communications media is essential for employee communications activities. There is a vital need to identify the best approaches to understand and improve communications skills. Research also found group training and individual counselling among the employees (Freitag and Picherit-Duthler, 2004) are more effective than print materials.

Management of organisational change through dialogue

Organisational change will exert pressure on the employees because they are not involved in the decision making process and the worst case is the uncertainty of their future (Daniels *et al.*, 1997). Fisher (1999), lists five reasons for resistance to organisational change among employees, as follows: they do not feel they need to change, fear of something they did not know, afraid of change in the relationship, threats to status and their influence, organisational structure is not conducive to changes and lack of resources. Thus, to proceed with change, the members of the organisation require a lot of information about the purpose and the effect of the change. Based on this, Fisher (1999) proposes an approach that can be undertaken by communication within an organisation through support, education and involvement.

First, corporate communication practitioners must be supportive, and identify those who have problems in accepting the changes, and provide them with the empathy and assistance necessary to accept these changes. Second, through education corporate communication, practitioners should be concerned with the provision of information to members on the transformation process. For instance, when the members of the organisation realise the benefits they will gain from the change, the organisation of resistance to change decreases (Fisher, 1999). Third, consider the involvement of members in planning and implementing organisational change to create a feeling of ownership among members to the organisation. For example, a dialogue between employees and senior managers can help to build good relations and harmony as well as obtain new ideas to implement and overcome the challenges of change and organisational development. Dozier *et al.*, (1995), Grunig and Hunt (1984) and Grunig *et al.*, (1992) identify dialogue or symmetrical two-way communication (a term widely used in public relations) as important to successful internal communications.

Internal communications

The success of an organisation is dependent upon effectiveness of internal communications that can affect the strategic manager's ability to engage employees and achieve objectives (Welch and Jackson, 2007). In the perspective of corporate communication, Welch and Jackson (2007) define internal communication as "the strategic management of interactions

and relationships between stakeholders at all levels within organisations" (p.183). On the other hand, this definition, when discussed with regard to internal stakeholders involves several groups such as line managers, team members and other internal groups (Freeman, 1999). The group aspects determine the direction and the content of communication.

Daniels *et al.* (1997) state that internal communication methods can be used by management, among others, meeting with employees, newsletters, magazines, movies, user and technical manuals, memos, posters and a bulletin board, closed-circuit TV, PA system, video, slides and other things. For some large organisations with many employees, almost all the methods mentioned are common in use. The employee handbook is an internal document that should be known by all employees of the company. Normally, the newsletter is an internal document published for the dissemination of information related to the employee, whether the business of the company or any issues that may affect employees (Howard, 1985). Apart from the internal newsletter, the intranet is also used by organisations to communicate with employees (Cornelissen, 2004).

2.3 The Link between Corporate Communication and Management

Goodman (2000) believes that strategic action should be practised by professional managers to establish and maintain favourable and coherent corporate communication across different stakeholder groups (Cornelissen, 2004). This group includes both internal and external stakeholders of the organisation (van Riel and Fombrun, 2007). The main objective for strategic communication is to communicate effectively (Goodman, 2000) and advocate a positive attitude (Argenti, 2000) among workers. The most important corporate communication provides a potential route for competitive advantage for the organisations (van Riel, 1995).

Since corporate communication entails selectively communicating the strategic organisation's views and objectives to those stakeholders whom it regards as important CCM can, therefore, be described as a key management strategy. Its role as a strategic management function grows significantly especially when dealing with corporate management issues (Yamauchi, 2001). Therefore, the corporate communication role is vital as a management function in

contemporary organisations (Goodman, 2004) and is confirmed as an instrument of management (Welch and Jackson (2007).

Today, corporate communication practitioners are expected to manage extremely complex and varied operations within an organisation. They should be knowledgeable in the business related activities and areas like advertising marketing, information systems and research, in addition to other conventional roles relating to public relations activities (Harris and Jennings, 1986). Therefore, the greatest challenge to the organisation system today is "the pressure from various constituencies and stakeholders such as shareholders, the media, financial analysts, and the labour force itself" (Argenti, 1996, p.10). Those of the stakeholders are educated and demanding (Dowling, 1990).

Some have established a link between corporate communication and management (Varey, 1997; Varey and White, 2000) and studies also confirm corporate communication as a strategic management function (Cornelissen *et al.*, 2006; Goodman, 2006). A management function plays a key role in the development and maintenance of corporate communication for overseeing and coordinating works in different disciplines such as public affairs, media relations and internal communication (Cornelissen, 2008). Therefore, the dissemination and alignment of the core ideology of the company to the communication process and activities is vital in achieving a favourable public exposure (Melewar and Karaosmanoglu, 2006a). In a business setting, corporate communication has to deal with stakeholder perceptions to gain competitive advantage for the organisations.

In order to play a strategic management role, van Riel (1997) suggests that corporate communication of the organisation should be at the top management level. At this point internal and external communication may be integrated to promote effective corporate communication. It also must be accepted as an integral part of an organisation's management team in order to participate effectively in organisational decision making and be part of a company's dominant coalition (White and Dozier, 1992). Relocation of corporate communication at the top management level will emphasise its role as an 'umbrella for the variety of communication forms and formats' (Shelby, 1993).

According to Simoes *et al.*, (2005) "management plays a key role in the development and maintenance of corporate identity, including paying particular attention to the internal and controllable aspect of the process" (p.153). In the study described in this dissertation, it is taken that the management role of corporate communication is that it can be controlled internally by the company. The controllable functions of CCM include managing public relations, employee communication, investor relations and corporate advertising (Balmer and Soenen, 1999). These involve communications with internal stakeholders (employees), and also external stakeholders (media, customers and government) that can be managed and controlled directly. Despite CCM functions being manageable, uncontrollable communication such as informal communication between employees with outsiders and third party reports (Balmer and Soenen, 1998; Melewar and Jenkins, 2002) cannot be directly managed but can be influenced through an effective CCM programme.

2.4 Corporate Communication and Other Related Terms

Since corporate communication has been used interchangeably with other relevant terms in past research (van Riel, 1997), it is important to note the differences and similarities between the definition of corporate communication and those of other concepts. Five constructs (corporate communication, public relations, organisational communication, management communication and marketing communication) will be briefly discussed in Table 2.6 below.

Table 2. 6 : Definition of corporate communication and other related concepts

Concept	Definition	Relevant Questions	Comment
Corporate Communication	Corporate communication can be defined as the set of activities involved in managing and orchestrating all internal and external communications aimed at creating favourable starting points with stakeholders on whom the company depends. (van Riel, 1997)	 What are the activities in corporate communication? What is the internal and external communication in corporate communication? What are the outcomes needed by the company by implementing corporate communication activities. 	A centre of communication for all organisations (internal or external communication). The corporate communication function should be directly under CEO of the company.
Public Relations	Public relations is the management function that identifies, establishes and maintains mutually beneficial relationships between an organisation and the various publics on whom	 What is the current relationship between an organisation and its public? What are the public relations programmes? 	To maintain the relationship with public through a PR programme such as community relations and media relations. These activities will portray a good image

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	its success or failure depends (Cutlip <i>et al.</i> , 1985).		of the company.
Organisational communication	The particular domain of organisational communication centre upon messages, message flow, interpersonal interaction, interaction patterns, information processing, and symbolisation in organisations (Leipziq and More, 1982).	 What is the best way to communicate to employee? What are the main issues on supervisor-subordinate communications? 	Including supervisory- subordinate communication to improve employee communications in the organisations.
Management Communication	The process through which modification of interpersonal and organisational outcome occurs as a result of message exchange (Hawkins and Preston, 1981).	What are the communication skills needed by the managers?	These may include interpersonal skills.
Marketing Communication	Marketing communication is a subfield of marketing which involves personal selling, advertising, publicity, public relations, reseller support — merchandising, product sampling and packaging changes. These are all communications tools and the subfield is really an attempt to bring together several diverse parts of the marketing mix under one conceptual framework based on communication research and theory (Ray, 1973)	What channel of communications can be used in marketing programmes?	Communications tools that relate to marketing activities.

Source: Adapted from Cutlip *et al.*, (1985); Leipziq and More, (1982); Hawkins and Preston, (1981) and Ray, (1973)

Public relations have always been identified as publicity, propaganda, policy makers, pressagentry and advertising. A review of public relations definitions suggests a number of common themes such as 'management' 'organisation' and 'public'. For example, a widely quoted definition from Cutlip *et al.* (1985) defined "public relations as a management function that identifies, establishes and maintains mutually beneficial relationships between an organisation and the various publics on whom its success or failure depends" (p.1). The management function in PR includes evaluating public attitudes, policy making and ascertains specific procedures to engage with public interest and implement actions and programmes to gain public understanding and acceptance.

As an attempt to maintain a mutual understanding between an organisation and its public, Vercic *et al.* (2002) identify four roles of public relations based on their research in European countries:

- 1. **Managerial role**: Develop strategies to maintain relations with the public in order to gain mutual understanding;
- 2. **Operational role**: Prepare a means of communication for an organisation (and its members) in order to help the organisation formulate its communication;
- 3. **Reflective role**: Analyse changing standards and values in society and discuss these with the members of the organisation, in order to adjust the standards and values of the organisation regarding social responsibility and legitimacy;
- 4. **Educational roles:** Help all the members of the organisation to become communicatively competent, in order to respond to social demand.

Researchers believe that corporate communication is rooted in public relations (for example, Argenti, 1996; Belasen, 2008; Cornelissen, 2008; van Riel, 1995). Corporate communication has many similarities with public relations in terms of practicality and is, theoretically, because PR is a prelude to corporate communication (Kitchen, 1997). The public relations function is apparently clear, and has discrete responsibilities to oversee corporate communication that governs the organisation and its management function (Varey, 1997).

There are three main similarities between public relations and corporate communication. First, both variables play a role as strategic tools in organisations (Winokur and Kinkead, 1993). For example, public relations are involved in much organisational strategic management such as image, reputation, issues management and crisis communications.

Second, the management function in public relations has long been recognised (for example, Cutlip *et al.*, 1985; Grunig and Hunt, 1984; Harlow, 1976) as the same as corporate communication. Public relations are as much a part of management as human resource management or financial management in organisations. Therefore, public relations is referred to as the management of relationships between the organisation and its diverse 'publics' that includes employees, customers, shareholders, and other 'key groups' on which the

corporation depends for support (White, 1991). It was formed to achieve management objectives, to identify its philosophy and to provide change in the organisation (Baskin *et al.*, 1997).

Third, public relations deal with internal and external public to disseminate the corporate message. This function is similar in corporate communication. However, in corporate communication, the term of 'stakeholder' is widely used as a substitute to the word 'public' in public relations. The media (for example, electronic media, print media and new media) is an important channel in sending a message to their internal and external 'public' (Cutlip *et al.*, 2000). In general, public relations has various significant 'publics' and communicates through personal and impersonal media (Mercer, 1992). During the communication process, public relations publicise a positive image of the company, which leads to a good reputation. To make this successful, a public relations specialist needs to clearly define their 'public', have adequate general knowledge of the corporation's business, role and identity and clearly understand all the organisation's plans that impact the public relations programme. Although corporate communications are rooted within public relations, the terms do have different meanings.

Organisational communication is primarily concerned with a system such as choosing an appropriate channel, managing information and decision making (Smeltzer *et al.*, 1983). However, it always crosses and overlaps with the management and business communication area. The parameters of the field embrace internal communication; human relations; management-union relations; downward, upward, and horizontal communication, skills of speaking, listening, and writing as well as communication programme evaluation (Redding and Sanborn, 1964). A broad view of this includes several domains such as messages, message flow, interpersonal interaction, interaction patterns, information processing, and symbolisation in organisations (cited in Leipziq and More, 1982).

Organisational communications also sets its sights on corporate stakeholders such as shareholders, financial journalists, investment analysts, regulators and legislators (Shelby, 1993). However, in organisational communications, stakeholders generally decide whether the organisation should communicate with them (Grunig, 1992). For example, external

pressures generally compel the company to reveal information that would not have been shared otherwise. Basically, the executives' statements in annual reports are an important medium to disseminate company information to their shareholders, the stock market, and society at large. Therefore, effective organisation communication implementation can influence the capability of organisations in attaining their goals (Young and Poost, 1993).

The idea of drawing a link between organisational communication and corporate communication has been implemented by Argenti (1996). He believes that communication studies within organisations fit better as a subset of corporate communication under the sub function of employee communication. This perspective allows organisations to treat their employees as one of many stakeholders (both internal and external) rather than merely as a part of human resource management, which is a much narrower approach. In addition, Shelby (1993) points out that the narrower definition of organisational communication is a discipline distinct from, but complementary to, corporate communication.

On the other hand, van Riel and Fombrun (2007) denote that a heterogeneous group of communication activities under organisational communications have four characteristics in common and encompass seven functions: Public relations, investor relations, public affairs, labour market communication, environmental communication, corporate advertising and internal communication. These seven functions help the corporate communication activities within the organisations.

Management communication is determined by efforts to accomplish work through other people (van Riel and Fombrun, 2007). The four basic functions of management comprise of planning, organising, coordinating and controlling. Indeed, management communication is communication intended to affect a manager's decisions and the foundation for guiding the organisation's internal actions.

According to Argenti (1996) "management communication focuses on communication strategy; skills, including writing and speaking; process, including teamwork and interpersonal behaviour; the global environment, which focuses on cross cultural communications; and function, which gets us to the connection with corporate

communication" (p.83). Pincus *et al.* (1991) add that management communication is evident in all levels of an organisation. However, in relation to corporate communication Van Riel (1995) narrows this to four functions, which include: Developing organisational vision, organisational leadership, managing the process of change and motivating employees.

Firstly, developing organisational vision, mission and philosophies are important for organisations. For instance, Goodman (2000) and Yamauchi (2001) insist that with a clear statement of what the corporation stands for, its goals and its practices will create positive images in the minds of internal and external public. Secondly salient organisational leadership in management communication has been studied by Kouzes and Posner, (1995) and Takala (1997). According to them, a charismatic leader would influence the effectiveness of the organisation, as well as the performance, by giving a clear direction to achievement.

The third function is managing the process of change, which is the response most strongly correlated (Nelissen and van Selm, 2008). In the process of change, management communication will influence the objective and consequences of the process. Employees score high on positive responses which indicates they are satisfied with management communication, and low on negative responses (Nelissen and van Selm, 2008). Finally, motivating employees is one of the corporate communication functions under management communication which is a human resource function (Goodman, 2001). However, the communication practitioner needs to consider the styles of adult learners in an attempt to motivate this group of people (employees). All the above elements which are influenced by management communication affect corporate communication (van Riel, 1995)

Marketing communication has a relationship with corporate communication in specific areas, especially a wide range of external communication. These include five functions that can affect corporate communication: Advertising, sales promotion, direct mail, sponsorship and personal sales (van Riel, 1995). These five functions help the organisation to communicate effectively with their external stakeholders. For example, marketing communication used by companies as a strategic tool to inform, persuade and remind consumers about what they offer (Holm, 2006).

In the current development, Hughes and Fill (2007) believe the ways to persuade customers to think and behave have changed. Persuasion is now regarded as one of a number of tasks that an organisation needs to accomplish through its communication activities. For example, providing information, listening, informing and reminding customers are just some of the complexities associated with contemporary interpretations and usage of marketing communications. The emphasis has shifted from a 'promoting to' to a 'communicating with' focus (Hughes and Fill, 2007). While the origins of the promotional mix may have provided a basis for firms, the complex communications environment of today suggests that consumers care little as to what terms are used to describe the forms through which they receive communications.

Many regard advertising as a vital and salient component of the communication mix. Franzen (1994) describes advertising as a process of relatively indirect persuasion, based on information about product benefits, designed to create favourable impressions that 'turn the mind toward' purchase. Moreover, sales promotion is often regarded as 'additional activities which support sales representatives and distributors' (Jefkins, 1993) to influence customer perception towards products and services.

According to Anderson (2001), marketing communications is viewed primarily as a one-way information mechanism in the 'traditional' marketing mix, by which the firm attempts to convince the target consumer audience of the benefits of the firm's products. Usually, decisions concerning communication messages were the responsibility of 'in-house' or 'external agencies', and the sales personnel played a role to disseminate these messages (Anderson, 2001; Kim *et al.*, 2004). Nevertheless, due to the increased sophistication of consumers and advancements in communications technology, the effectiveness of the traditional method of marketing communication declined significantly (Holm 2006; Kim, *et al.*, 2004; Pitta *et al.*, 2006). These factors have necessitated corporate communication for the organisation, as well as providing the ability for the organisation to develop a more intimate relationship with its target stakeholders.

Although the literature rarely considers the deeper implications of the marketing communication relationship with corporate communication, some conclude that the more

marketing communication is applied by management, the higher opportunity their employees' behaviour would incorporate communication management (Gupta, 2011; van Riel, 1997). In summary, although corporate communication shares certain characteristics with public relations, organisational communication, management communication and marketing communication, there are evidently differences, as shown in this section.

2.5 Effects of CCM: Strategic Management Perspective

As mentioned earlier, CCM is a vital instrument of the organisation for disseminating corporate strategies (Fleisher, 1998) through which the organisation can gain a competitive advantage in corporate settings (van Riel, 1995). Organisations cannot execute strategy to their stakeholders without communication. The role of corporate communication as a strategic management tool shows an ability to create and disseminate strategy; and to determine the important stakeholders and information needed (Forman and Argenti, 2005) in order to create the desired organisational outcomes (Rindova and Fombrum, 1999) such as mission achievement. An effective strategic management plan anticipates responses directly from stakeholders, as it is essential to understand their needs (Yamauchi, 2001). Therefore, CCM can be perceived as an important competitive instrument to support the organisation in its pursuit of strategic objectives and goals.

Generally, the elements of strategic management can be found from the integration of three forms of communication: firstly, management communication related to both internal and external stakeholders; second, marketing communications in relation to advertising and selling; and third, organisational communication involves internal media and public relations (Stainer and Stainer, 1997). From here, strategic implementation can be seen through the planned strategy by socialising its stakeholders to its own culture and using a communication strategy to form long-term relationships with the stakeholders in shaping the organisation's image and reputation (Rindova and Fombrun, 1999). In order to gain a better understanding of the interests of stakeholders, corporate communications can help by organising a dialogue with them (Varey and White, 2000).

In relation to marketing management, corporate communication is theoretically associated with implementing strategy and building a company's reputation and brand (Fombrun, 1996). It can work better if companies can continually perform well over the years in sustaining a consistent image to achieve a favourable reputation (Fombrun and Shanley, 1990). This can be achieved by having proper guides and stimulating the company's actions to ensure the management maintain focus on strategy implementation (Argenti and Druckenmiller, 2004).

Furthermore, Stainer and Stainer (1997) point out that corporate communication is an essential competitive weapon to support the organisation in pursuit of business excellence. They draw a strategic model with an underlying relationship between corporate communication and performance. Specific performance criteria are highlighted to attain communication performance excellence, such as quality and customer satisfaction; speed and flexibility; resource utilisation; innovation and creativity; employee satisfaction and ethical standards. Meanwhile, Whelan and Sisson (1993), on a different note, stress that poor communication has been revealed as a weakness in strategic planning activities. Therefore, corporate communication must be dynamic, because it aids high performance and helps to create business excellence by both enabling and achieving effective results, linking the strategic ingredients necessary for achievement.

From a leadership perspective, Forman and Argenti (2005) argue that despite current studies demonstrating that leaders have to understand the important link between corporate communication and strategy, many organisations fail to develop a systematic communication plan in strategy implementation. There are brief reviews in several pieces of literature in which this point of view is put forward; for example, Forman and Argenti (2005) suggest the function of corporate communication is best reported directly to the CEO. The hierarchy of the organisational structure, responsibility for strategic implementation and the 'logical' place for the corporate communication functions is within the CEO's supervision. It is particularly important to understand the importance and relevance placed by top management upon strategic corporate communications, which link with the objectives and corporate strategy of the organisation.

The future development of corporate communication would gain proper recognition as strategic issues with commensurate support through board-level representation (Varey, 1997). Corporate communication activities must be looked at as a key business function and investment opportunity, with a place in the decision making process throughout one's business; it is not simply an information dissemination role. Therefore, to play a strategic role, there are five challenges in the current development of corporate communication functions that include (1) new sophistication in customers, or audience; (2) new media technologies; (3) more widespread ethical environment; (4) stronger economic factors; and (5) new strategic alliance (Goodman, 2000). Hence, the corporate communication function has come to be increasingly significant; as Gilder (1982) suggests effective communication managers should be at the forefront of strategic planning to help their organisations to survive. In addition, Cornelissen (2008) believes the complex nature of corporate communication, especially in organisations with a broad geographical range, such as a multinational company or with a large range of products or services, need to be balanced by communication coordination through strategic management planning. In the next section, the impact of CCM on several issues will be discussed from a marketing perspective, to complement these findings.

2.6 Effects of CCM: A Marketing Perspective

The utilisation and consequences of CCM in marketing are predominantly found in studies of integrated marketing communication (IMC). Under this topic, the focus of studies ranges from the impact of CCM on corporate branding, image, promotion and public relations implemented by the organisations. However, the amount of empirical evidence is relatively limited.

To understand IMC, many have attempted to define it (for example, Blackwell, 1987; Duncan, 1993; Kotler, 1972; Plummer, 1993; Schultz, 1993). For instance, Duncan (1993) defines IMC as "the process of strategically developing and controlling or influencing all messages used to build and nourish a relationship with stakeholders" while Schultz (1993) defines IMC as "a concept of marketing communications planning that recognises the added value of a comprehensive plan that evaluates the strategic roles of a variety of

communications disciplines (for example, general advertising, direct response, sales promotion, and public relations) and combines these disciplines to provide clarity, consistency, and maximum communication impact" (p.17). From the perspective of corporate communications, the definition offered by Schultz (1993) shows a wider perspective, and involves marketing communication programmes using multiple communication options. The role of corporate communication can be seen in the process of designing, implementing and evaluating advertising, public relations, data-based marketing, publicity, direct responses, and sales promotion (Rose, 1996). Therefore, all these flow seamlessly from a common strategy that delivers a common voice and consistent message to the appropriate stakeholders.

In IMC, corporate communication is also found to have a significant influence on corporate branding. Corporate communication has diverse communication options for marketers to reach their stakeholders in terms of promoting corporate branding. According to Keller (2001), currently, the marketing environment is experiencing the emergence of new, nontraditional media, promotion and other communication types. Marketers must choose from various communication options to develop their communication programme to promote the organisation's corporate brand. These options include media advertising, interactive advertising and direct response, place advertising, trade promotions, point of purchase advertising, consumer promotions, sponsorship and event marketing, public relations and publicity, as well as personal selling. Recognising the importance of CCM, some have advocated that attempts must be made to study IMC to enhance brand and image (Duncan and Moriarty, 1997; Edell, 1993; Keller, 1996; Moore and Thorson, 1996; Percy 1997; Schultz et al., 1994). IMC is an important tool to project one's brand and image, and it allows companies to inform, persuade, incite and remind their consumers of their products and services. Consequently, it may contribute to sustained customer loyalty and greater brand purchases.

Apart from corporate branding, CCM is found to be an important element in corporate image. Varey (1998) indicates that, in general, marketing managers are more concerned with profitable activities, whereas CCM practitioners are more inclined to enhance communications, creating an image to gain competitive advantage. Whilst marketing communication is associated with brand image and product promotion, CCM is strategic, and

concerned more with corporate image. In an attempt to deal with the apparent conflict between marketers and corporate communication practitioners, Barich and Kotler (1991) introduce the notion of 'marketing image'. As such, this provides marketers with the role to manage corporate identity in order to promote the desired corporate image. They can use similar communication options to disseminate the corporate identity message to their target stakeholders. Both corporate communication and marketing have common objectives to boost the prosperity of the organisation by improving its reputation (and image). This can be done by creating a positive environment for corporate communication and marketing activities to influence stakeholder perceptions (Illia and Balmer, 2012; Saxton, 1998). Corporate reputation improvement depends on investment in communications design (Saxton, 1998). As a result it will affect not only customer and employee loyalty, but also financial performance. As a positive impact to the organisation, these integrated activities will influence customers to purchase the respective products.

The relationship between promotion, which is an important concept in marketing, and CCM has also been examined. According to Phelps and Johnson (1996) IMC mainly refers to the function of promotion, which includes advertising, sales promotion, public relations and packaging. Meanwhile, Jenkins (1990) adds that it would comprise every form of communication relevant to marketing and "requires attentions to every aspect of marketing strategy where communication occurs" (p.1-2). Despite the term of promotion being widely used by many to describe mostly one way processes of communication, promotion in marketing communications involves both ways to promote the corporation and products or services as well. Usually, marketing communications has two main strategies, to convert prospects into customers and at the same time retain existing customers. Thus, promotion should involve a wide range of communications channels and media to help the corporations change potential customer behaviour from ignorance to a decision to purchase. Furthermore, it also has a function to inform and remind customers of the companies' brand and products. As a result, promotion activities in marketing communication will contribute to increasing sales and market share by creating awareness and changes to customers' perceptions.

Corporate communication can influence customer attitudes not only in a personal promotion but also via corporate advertising. In contrast to personal promotion, which involves a limited

number of stakeholders, corporate advertising is much broader. Corporate advertising is a marketing function of persuasive communication, primarily with customers (Grunig, 1994). Typically, the objective of the advertising is to inform, influence and remind its target stakeholder about a product or service offered by the company. Therefore, advertising is always considered to be a vital marketing tool to the business setting, and it would need more information oriented for helping individuals to make a decision (Rust and Varki, 1996). The role of corporate communication can be seen in the disseminating corporate information to the target stakeholder.

Rose (1996) states that public relations are concerned with negotiated solutions with the public, similar to marketing that is concerned with the consumer. Looking at the relationship with public relations and marketing, the IMC function is seen in close proximity to public relations. The strategic role of IMC involves a variety of communications disciplines, including public relations, and it becomes an important part of marketing. For example, the use of agenda-setting styles of persuasion in promotional campaigns via media publicity (which is part of public relations activities) and product placements in feature films as an attempt to place the organisation's product into consumers' consciousness (Hutton, 1999). Other public relations tools can be used in marketing activities such as community relations, sponsorship, and advocacy, with the goal of increasing consumer awareness and the sales of the product.

2.7 Gaps in CCM Research

It is evident, based on the review of literature, that several research directions for further research can be pursued. First, there has been a long-standing debate about the fundamental concept of CCM (Argenti, 1998; Christensen *et al.*, 2007; Elving, 2010; Goodman, 2010; Goodman, 2000; van Riel, 1995; Varey, 1997). Although most corporate communication researchers and executives could benefit from using an integrated and more systematic management framework, the academic field of corporate communication is scattered, divergent, and lacks coherence (Belasen, 2008). This confusion is concerned with the central concept of corporate communication, and has not been resolved (van Riel, 1997). Therefore, a broader view of corporate communication is needed, because the concept and practices

need to be refined and better understood. Goodman (2000), for example, attempted to make explicit the theoretical, empirical and practical value, and the need to recognise tradeoffs among academics and practitioners.

Additionally, segmentation of the field into diverse topical areas evidently suggests the need to identify a universal framework that simplifies the field and presents it as a uniform and consistent base of knowledge. This situation can be meaningfully positioned within interdisciplinary research and educational fields of management (Stainer and Stainer, 1997). Therefore, this issue is important, and requires extensive studies because clear knowledge about the dimensionality of constructs facilitates valid and reliable scales (Churchill, 1979).

Second, corporate communication practitioners have failed to convince top management that CCM has economic or financial values to practice. Despite the point of its social or intangible values, the argument goes on. In many management meetings corporate communication practitioners continuously face the challenge to justify their worth often in monetary terms (Burson 1993; Macnamara, 2006). Therefore, corporate communication practitioners must be able to demonstrate that their CCM effort is worthwhile, and significantly affects financial performance. For example, Forman and Argenti (2005) suggest a research focused on "outcomes which might include effect on sales or an increase in stock" (p.262). Public relations research (the CCM function) sees the economic values of PR as fundamental to the relationship between benefits and cost connected with PR programme implementation (Ehling, 1992). Another study conducted by Aupperle et al. (1985) looks at the relationship between corporate social responsibility and profitability based on return on asset (ROA), and Chang and Abu Hassan (2006) test the Advertising Value Equivalency (AVE) of organisations. However, to date, there is no research that correlates how corporate communication makes organisations more successful in terms of financial performance. Thus, as an attempt to fill the gap, this study provides an empirical research on the impact of communication towards organisational performance success.

Third, it is not surprising to find CCM using technology to implement programmes. Organisations always pursue the latest technology advancement and innovation to become better. Therefore, the application of ICT innovations in the corporate organisation can

improve the communication internally and externally along with the organisation's performance (Papastathopoulou *et al.*, 2007) such as mission achievement. Nevertheless, some software is frequently customised to fit the requirements and needs of the company or organisation. In addition, the frustration experienced in managing corporate communication is mainly due to the lack of skilled people and insufficient training, especially in IT (Varey, 1997). In this case, top management are responsible for encouraging users of IT to be adequately prepared (Forman and Argenti, 2005). The role of management support on ICT diffusion innovations is vital for corporate communication improvement (Peansupap and Walker, 2005). Since past studies have not explored the role of management in ICT diffusion innovation on CCM, this study will examine this matter.

Fourth, culture is an intangible element that can help organisational health to attract and retain a quality person in an organisation (Goodman, 2001). This is because a positive culture is absolutely necessary for the global corporation, and it provides immense competitive edge to the organisation (Sadri and Lees, 2001). Adler (2002) indicates that the major challenge for a manager is to communicate effectively even when they are working domestically with a homogeneous culture. Therefore, a detailed understanding of this interrelationship is needed in order to adequately account for the influence of corporate culture on corporate communication, especially in the difference corporate settings (Clausen, 2007).

Finally, the majority of studies about corporate communication were completed mostly in the western countries such as the US, the UK, the Netherlands and few were pursued within developing countries (For example India, South Africa and China). Western theories are based on the set of assumptions that relate to their own culture and institutional underpinnings; for example, persuasion theory looks at attitude (like or dislike, favour or oppose) as one of the elements. In certain circumstances, attitudes will vary according to the culture. Consequently, this provides inconclusive findings and may not be generalised to a larger population. To bridge this gap, and understand CCM better, we need studies which have been undertaken in non-western countries/contexts.

Table 2.7 summarises the potential directions for CCM research based on five main gaps: The fundamental concepts of CCM, the financial or economic value of CCM, technology innovation, and cultural issues

Table 2. 7: Potential directions for CCM research

Issues	Explanation	References
Fundamental concepts of	Need more investigation for which the proposed	Belasen, 2008;
corporate communication	models would greatly aid analysis and	Cornelissen et al., 2006;
_	comprehension.	Stainer and Stainer, 1997
	To develop the contextual and holistic	
	understanding of the practice dimensions of	
	corporate communication that is essential to	
	unpacking the complex driving forces of	
	management of corporate communication and its	
	strategic outcomes with stakeholder	
	Theoretical development on corporate	
	communication to conceptualising and	
	understanding corporate communication area of	
	practice.	
Economic / financial value	Although in its most all-encompassing sense it is	Cornelissen et al., 2006;
and the impact to	fairly obvious that communication is related to	Forman and Argenti,
organisational	productivity and performance, it has yet to be	2005; Fleisher, 1998;
performance	validated.	Gibb, 1973; Higgins and
	• Research focus on outcomes, not just activities.	Bannister, 1992; Lacopo,
	Outcomes include the effect of corporate	1997; Stainer and Stainer,
	communication on sales, or an increase in stock	1997; van Riel, 1997
	price.	
	• In order to be judged effectively, CCM must have a	
	positive return on investment (ROI)	
	We suspect that credibility and share price	
	mutually influence one another in time-lagged	
	relationship, but this assumption need to be tested.	
	• It is necessary to see how companies have created	
	methods for measuring success.	
Technology innovation	Corporate communication departments use	Argenti 2006; Forman
and the role of	technology to implement their programme, but	and Argenti, 2005;
management	sophisticated programmes were developing at some	Goodman, 2001
	of the companies.	
	• As IT is introduced, how does a company ensure	
	that the intended end uses and beneficiaries of the	
	technology do, in fact, provide benefit?	
	What are other innovative companies doing in this	
	arena and what are their best practices?	
Cultural/contextualisation	Drawing on other case exemplifications could	Clausen, 2007; Goodman,
issues	contribute additional insight into negotiated	2001; van Riel, 1992
	culture as the product of other settings and	
	industries.	
	Impact of cultural difference at various levels,	
	such as national, organisational or group and	
	individual.	
	The impact of language on culture and	
	communication	
	Most studies have been conducted in a specific	
	setting (e.g. UK and US). Theories should be	

tested in different settings and environment (for example,. industries and countries) to increase their generalisability.	
 Developed for the concept, it is still unclear whether those scales originally designed in western countries can be applicable to the non- western context. 	

Source: Developed for the study

2.8 Summary

In this chapter, the definition of the concept of CCM as being the management of the organisational perception which can be influenced by all internal and external information (message of communication) means and measures (Cornelissen, 2008; Schmidt, 1995) was provided. Corporate communication can be summarised as follows.

First, corporate communication is a complex concept (Christensen *et al.*, 2007). It has been variously defined and used interchangeably with related concepts in different areas (Macnamara, 2006; Wright, 1997). Second, corporate communication can be influenced by tangible and intangible factors, both outside and inside organisations. Overlapping determinants have been found in different research areas (for example, public relations), indicating that relevant basic thoughts are converging. Likewise, the consequences of CCM, albeit diverse, can be classified into a limited number of types. Almost all consequences reported in past studies are positive, or at least neutral. However, there has been unclear understanding of the mechanisms underlying these relationships.

There are several things that the literature is lacking, especially in terms of segmenting the field of corporate communication into diverse topical areas. For example, the issues of economic values and the influence of culture are main gaps to be filled. The more important issue is that the ability of corporate communications to interface effectively with key stakeholders could have an impact on organisational performance (Proctor and Kitchen, 2002).

In the next chapter, the conceptual model of the study will be described and the development of hypotheses will be explained. Consequently, the relationship between CCM and its

antecedents will be elaborated. Finally, the impact of CCM will be explained, and hypotheses will be presented.

CHAPTER 3: CONCEPTUAL FRAMEWORK AND HYPOTHESES

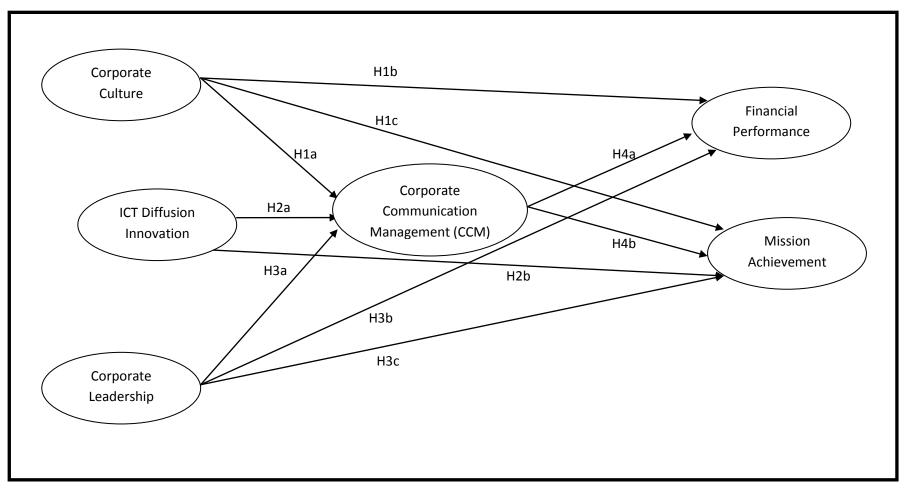
3.1 Introduction

Six main constructs are considered in this study: Corporate Communication Management (CCM), corporate culture, ICT diffusion innovations, corporate leadership, financial performance and mission achievement. Therefore, the structure of this chapter is as follows. First, it reviews the linkages between CCM and its antecedents and the impact of CCM (organisational performance). Hypotheses will be presented after the discussion of each relationship of the constructs of the framework.

3.2 Research Framework and Hypotheses Development

In attempting to clarify the causal relationships among a different construct and the other factors affecting the CCM, as well as any ambiguities of CCM conceptualisation that might exist, a conceptual model is proposed. The conceptual model will function as a way to illustrate the multiple dimensions of corporate communication. Figure 3.1 shows the key constructs.

Figure 3. 1 : A conceptual model of Corporate Communication Management (CCM)



Source: Developed for the study

3.3 Corporate Culture

Corporate culture has been conceptualised in many ways comprising multiple sets of dimensions such as *beliefs* (Chapman *et al.*, 2011; Denison, 1990; French and Bell, 1984; Pettigrew, 1979; Schein, 1990), *values* (Deal and Kennedy, 1982; Denison, 1990; French and Bell, 1984; Peters and Waterman, 1982; Schneider *et al.*, 2013; Quinn, 1988) and *behaviour* (Denison, 1990; French and Ball, 1984; Kotrba *et al.*, 2012; Kotter and Heskett, 1992; White, 1991). These dimensions serve as a substructure for organisation management systems, management practices and behaviour (Denison, 1990). It also comprises ideas that guide organisational standpoints towards employees and customers (Jin and Drozdenko, 2010; Pascale and Athos, 1981).

The more cultural and expressive aspects of organisational life that are used extensively are the concepts of symbol, languages, ideology, belief, ritual and myth (Pettigrew, 1979; Siew *et al.*, 2004). Although many definitions of culture have appeared from various works of anthropology, sociology and organisational behaviour, none is distinctively unique that could be adapted as a universal definition. Deshpande and Webster (1989) define organisational culture as the pattern of shared values and beliefs that help individuals understand organisational functioning, and thus provide norms for behaviour in the organisation.

Researchers such as Van der Post *et al.* (1998) define culture as being similar to what personality is to the individual, which is classified as an unseen but unifying force that creates meaning and direction. Furthermore, in the context of organisation, it is a system of shared meanings, or systems of beliefs and values that ultimately shape employees' behaviour (Deshpande and Webster, 1989). Table 3.1 shows definitions and conceptualisations of corporate culture:

Table 3. 1: The definition and the conceptualisation of corporate culture

Author	Definition	
Bower, 1966	That it is simply the way things are done in an organisation.	
French and Bell, 1984	As prevailing patterns of values, attitudes, beliefs, assumptions, expectations, activities, interactions, norms, and sentiments in an organisation.	
Quinn, 1988	As the set of values and assumptions that underlie the statement. 'This is how we do things around here'.	

Chapter 3: Conceptual Framework and Hypotheses

Deshpande and	The pattern of shared values and beliefs that help individuals understand	
Webster, 1989	organisational functioning and thus provide the norms for behaviour in the	
	organisation.	
Schein, 1990	As the basic assumption and beliefs that are shared by members of an organisation.	
Denison, 1990	As the underlying values, beliefs and principles that serve as a foundation for an	
	organisation's management system as well as the set of management and	
	behaviour.	
White, 1991	As the sum of behaviour patterns that is built up over many years.	
Kotter and Heskett,	As the behaviour patterns or style of an organisation that new employees are	
1992	automatically encouraged to follow.	
van der Posts et al.,	A system of shared meaning, the prevailing background fabric of prescriptions and	
1998	proscriptions for behaviour, the system of beliefs and values and the technology,	
	and tasks of the organisations together with the accepted approaches to these.	

Source: Developed for the study

Based on the above definition, there are two main elements that relate to the study described in this dissertation. First, culture should be a pillar of communication when communicating a corporate message to internal and external stakeholders. Second, culture creates a positive attitude among members when dealing with problems. Corporate culture impacts an organisation's image, as well as its performance (Rashid *et al.*, 2003).

The important role of corporate culture in the management of the marketing function is recognised. For instance, Deshpande and Webster (1989) put forward five paradigms that affect marketing research, which include: (1) comparative management, (2) contingency management, (3) organisational cognition, (4) organisational symbolism and (5) structural / psychodynamic perspective, as can be seen in Table 3.2.

Table 3. 2: Implication of organisational culture paradigms for marketing research and methodology

	Organisational Paradigm	Marketing Research Implications	Methodological Implications
1.	Comparative marketing management	 Cross-cultural study of standardisation vs customisation on international marketing programmes Research on relative effectiveness of cost-based vs. culture-based marketing control mechanisms in different countries. 	Cross-sectional survey research
2.	Contingency marketing management	 Research on impact of customer needs satisfaction-oriented culture vs. stockholder wealth maximisation-oriented culture on market performance. Relative impact of organisational structure and culture on innovativeness Research on making marketing strategy consistent with culture and structure. Role of CEO in creating and disseminating a 	Cross-sectional survey research or ethnographic method

Chapter 3: Conceptual Framework and Hypotheses

		customer orientation • Extent of differentiation of marketing department in a firm and its impact on "marketing marketing" to top management. • Impact of environmental change on the nature and effectiveness of brand management structures.	
3.	Marketing cognition	 Research on the creation, dissemination, and use of marketing knowledge in firms. Study of impact of organisational restructuring on shared marketing cognitions. Research on sources of organisational conflicts involving marketing and other departments (e.g., marketing / R&D conflicts in new product development process) 	Ethnographic or phenomenological research
4.	Marketing symbolism	 Research on the socialisation of new marketing recruits. Impact of strong marketing socialisation on creativity and innovativeness. Study of importance of organisational symbols in sales transactions. 	Ethnographic or phenomenological research
5.	Structural/psychodyna mic perspective in marketing	Research on the historical development of "market-driven" firms as expression of founder' wills.	Ethnographic or historical research

Source: Adapted from Deshpande and Webster, 1989

Even though there are various measurements of corporate culture from previous literature, those of Deshpande and Farley (1999) are, in this dissertation, used as the basis for the study which follows on from this. This measurement has been used by Rashid *et al.* (2003) in the context of Malaysian organisations. Additionally, external content validity for the measurement has been tested. Deshpande *et al.* (1993) and Deshpande and Farley (1999) discuss four characteristics of leadership comprising consensual, entrepreneurial, bureaucratic and competitive culture.

- 1. Consensual culture emphasises loyalty, tradition and internal focus;
- 2. Entrepreneurial culture emphasises innovation and risk taking;
- 3. Bureaucratic culture is characterised by internal regulations and formal structures; and
- 4. Competitive culture is characterised by an emphasis on competitive advantage and market superiority.

Empirical research conducted by Desphande and Farley (1999) and Denison (1984) found that entrepreneurial and competitive culture performs better than consensual and bureaucratic

cultures. Pool's (2000) constructive culture reveals that an organisation with such culture embraces creativity, which promotes quality over quantity of work. This type of culture matches well with Desphande and Farley's (1999) entrepreneurial culture, and thus prove that it is highly suggested for organisations to cultivate an entrepreneurial type of culture. It is important for managers to consider the positive effects of the above culture to promote work outcomes, such as a job performance and job commitment. Therefore, the first step in determining the continuing success of organisations will be for managers to determine or ensure an appropriate and specific type of culture or a combination of cultural types, developed and practiced by respective organisations (Abu Bakar *et al.*, 2008).

In essence, institutional theory suggests that companies must attempt to create a good corporate culture for organisations to draw long-term support from stakeholders. Therefore, the roles of corporate communication are important in order to gain stakeholders' support. In the following section, the relationship between corporate cultures with CCM and organisational performance constructs will be discussed; hypotheses will also be developed.

3.3.1 The Relationship between Corporate Culture and CCM

CCM and corporate culture lie adjacent to each other. The statement "culture is communication and communication is culture" (Hall, 1959, p.186) reflects the relationship of each variable. Culture and communication are two different concepts; however, the two concepts are often linked. According to Smith (1966) and Kulich (2012) the element of communication is varied and changes from time to time, and the elements of culture can also be influenced and change over time. This research seeks to understand such interrelationships and mutual dependence in greater detail, so as to adequately account for the influence of corporate culture on CCM, because intense interest in culture is one of the most significant trends in contemporary communication studies (Ang, 1990, p.239).

Even though extensive research on communications issues has been undertaken and the relationship between communication and culture has been reviewed (Brittimes *et al.*, 2009; Kulich, 2012; Peltokorpi and Clausen, 2011; Samovar *et al.*, 1981), specific studies between corporate culture and CCM are limited. In reality, there are reciprocal links between culture

and communication (Moreno *et al.*, 2010; Sriramesh *et al.*, 1996). For instance, communication acts as a way for the organisation to develop and maintain its culture and, at the same time, culture is an antecedent to the nature of communication in an organisation. Therefore, the changes of organisational communication systems may be an approach to change the organisational culture. In other words, *culture and communication have a symbiotic relation and changing one will facilitate a modification of the other* (Sriramesh *et al.*, 1996, p.239). In addition, Goodman (2000) and Gupta (2011) believe that the function of corporate communication promotes a strong organisational culture.

Due to limited study of the link between CCM and corporate culture, this study looks at another sub function of corporate communication, such as public relations (L'Etang, 2012; Rhee, 2002; Vercic *et al.*, 1996), organisational communication (Brown and Starkey, 1994; McMillan *et al.*, 2012; Schall, 1983) and international communication (Sriramesh *et al.*, 1996) to justify the impact on corporate culture. As mentioned earlier, previous study shows a significant effect on the relationship between culture and public relations (L'Etang, 2012; Rhee, 2002; Vercic *et al.*, 1996). For example, corporate culture was found to be an important variable in explaining the intricate relationship between communication and public relations within organisations (Sriramesh *et al.*, 1996). More extensive research conducted by Sriramesh *et al.*, (1996) finds that "culture is neither a necessary nor sufficient condition for excellence in public relations" (p.230).

There are also several studies related to culture within organisational communication. For example, a case study conducted by Brown and Starkey (1994) shows that the organisational cultural factor should be taken into an account organisational communication. They believe that culture may affect systems and processes of communication management. At this level, all the cultural traits are inter-related and influence the communication structures in the organisation. Although organisations have formal orientation procedures (formal communication) to acclimatise new employees to the organisational value and norms, acculturation also takes place at informal levels (Sriramesh *et al.*, 1996).

In the context of international communication, the impact of culture is significant. An example can be found in multinational companies that have worldwide operations.

Multinational companies have to manage their communication systems across borders, race, religion and languages via various tools of communication (e.g. the internet, telephone and in person). Therefore, such an intercultural communication understanding will help improve the capability of corporate communications practitioners to communicate successfully across cultural boundaries (Moreno *et al.*, 2010; Sriramesh *et al.*, 1996). In essence, cultural diversity between member of organisations and other stakeholders will influence the companies' style of communication. Acquiring all types of corporate culture can help a company to effectively influence the positive assessment of CCM by its stakeholders. According to Sadri and Lees (2001), a positive corporate culture provides a considerable competitive edge to the organisation. As a result, the company has a significant impact on a firm's long-term economic performance (Rashid *et al.*, 2003).

Corporate culture reinforcement on the importance of CCM is likely to encourage better organisational communication systems at all levels (individual and group) based on values, beliefs and behaviour in creating a fundamental identity for the organisation. Such an organisational culture will also enhance and improve the relationship between the management and workers in general (Varey, 1997). In addition, the relationship between corporate culture and CCM can be seen in the contexts of companies in activities such as motivating, leading, negotiating, problem-solving, decision making and exchanging ideas and information. Successful communication depends on the ability of managers and employees from one culture to understand other cultures (Clausen, 2007). Therefore, to date, culture has become an important concept in the process of communication at an organisational level.

There is no specific empirical evidence discussed in the relationship between corporate culture and corporate communication. However, to justify the rational impact of corporate culture, several literatures (Clausen, 2007; L'Etang, 2012; Sriramesh et al., 1996; Rhee, 2002) have been gathered in communication and marketing research. Taking into account the above discussion, thus far, it is proposed that:

Hypothesis 1a: Corporate culture will have a positive effect on Corporate Communication Management (CCM)

3.3.2 The Relationship between Corporate Culture and Organisational Performance

Organisational culture has an effect and potential impact on organisational success (Deal and Kennedy, 1982; Denison *et al.*, 2012; Khan and Afzal, 2011; Ouchi, 1981; Peters and Waterman, 1982). Empirical research shows a positive relationship between corporate culture and organisational performance, particularly with regard to an organisation's long-term economic performance (Clement, 1994; Kotter and Haskett, 1992; Rashid *et al.*, 2003; Sheridan 1992; Van der Post *et al.*, 1998). However, Calori and Sarnin (1991) find that there is no consensus in the relationship between corporate culture and economic performance, while Denison (1990) finds that certain types of culture could enhance organisational performance.

Research has contributed to the culture-performance field of studies, explicitly acknowledging that culture is treated as a variable for a specific research purpose (Chatman and Jehn, 1994; Denison *et al.*, 2012; Denison and Mishra, 1995; Kotter and Heskett, 1992). While there has been much research on the definitions and nature of culture, there is relatively little research on culture and performance (Reichers and Schneider, 1990). Table 3.3 shows several culture-performance researches from various contexts.

Table 3. 3: Research on relationship between corporate culture and organisational performance from various industries

Researchers	Type of culture	Type of	Organisations	Respondent
		Performance		
Kotter and Heskett	Corporate	Organisational	Various industries	Managers
(1992)	culture	performance		
Chow et al., (2002)	Corporate	Performance	Manufacturing firms	Middle manager
	Culture			and top level
				manager
Rashid <i>et al.</i> , (2003)	Corporate	Financial	Public listed companies	Managers
	culture	Performance	_	_
Lee and Yu (2004)	Corporate	Organisational	Three industries – high-	Top two to three
	culture	performance	tech manufacturing,	levels of
			hospital and insurance	management
Abu Bakar et al.,	Corporate	Job performance	Various industries	Managers
(2008)	culture			

Source: Developed for the study

Many researchers believe that there is a strong relationship between corporate culture and organisational performance in the contexts of companies (Denison, 1984; Denison *et al.*, 2012; Rashid *et al.*, 2003; Van der Post *et al.*, 1998). The impact of corporate culture on organisational performance can be discussed from two perspectives: (1) financial performance, and (2) non-financial performance. Both financial and non-financial measures are vital in determining the organisational performance (Harold and Darlene, 2004; Kaplan and Norton, 1992; Rajender and Jun Ma, 2005) and with that, more comprehensive results can be acquired (Rose *et al.*, 2008).

While statistical evidence seems to be lacking, it is widely acknowledged that organisational culture has the potential to have a significant effect on financial performance (Jeena Ravendran, 1993; Kotter and Heskett, 1992; Rashid *et al.*, 2003; van der Post *et al.*, 1998). An analysis of the sustained superior financial performance of certain American organisations has attributed their success to the culture that developed by its employees (Barney, 1986). The strength lying within the cultural values held by the employees is then taken to predict the future of the organisational performance, generally financial (Lee and Yu, 2004).

Studies indicate that corporate culture has an impact on a firm's long-term financial performance (Dimitriades and Papalexandris, 2012; Kotter and Heskett, 1992; Sanger, 2008). It will possibly be an even more significant factor in influencing the organisation's success or failure in future. Today, it is common for corporate cultures to be seen as inhibiting long-term financial performance, even though firms are staffed by reasonable and intelligent people; it is because financial performance is correlated with return on assets, return on investment, current ratio (Rashid *et al.*, 2003), growth in annual premium and sum assured in insurance firms (Lee and Yu (2004), return on average equity, return on average assets, total asset growth rate and share return (Dimitriades and Papalexandris, 2012; van der Post *et al.*, 1998). In addition, financial data offers an accurate basis for measuring organisational effectiveness.

Moreover, Schneider (1990) indicates that the organisation's success depends on the cultural focus. He adds, with cultural focus organisations will gain better financial returns, which includes higher return on investment (ROI), higher return on assets (ROA) and higher return

on equity (ROE). In support, Denison and Mishra (1995) and Dimitriades and Papalexandris

(2012) discovered that the strength of culture is significantly associated with short financial

performance. However, certain aspects of corporate culture may improve performance in one

context, but may be ineffective or dysfunctional in another context (Chow et al., 1996;

Lincoln and Kalleberg, 1990; Steers, 1989). Thus, the study of organisational culture mainly

depends on the assumption or argument that certain cultures practice in the organisation's

lead to superior organisational performance (Rose et al., 2008).

Unlike financial performance, the research specific link between corporate culture and

mission achievement is limited. In many organisations, the performance determining

corporate culture is derived from organisation vision and mission (Chow et al., 2008) as a

part of their corporate philosophy. With a clear corporate philosophy, the management

enables subordinates to co-ordinate their activities to achieve common purposes which are

stated in the mission statement (Ouchi, 1983). An accurately formulated and clear philosophy

statement also indicates several advantages (Ledford et al., 1994) such as helping the

decision-making process; interpretation of any uncertainty; motivating and inspiring feelings

of commitment among employees to contribute to the organisational performance. In this

case, the mission can be achieved with everyone in the organisation working for internal

change (Aronson et al., 2013; Saffold, 1988).

Corporate culture has an impact on other non-financial performance variables such as

commitment (Rashid et al., 2003) and job performance (Abu Bakar et al., (2008). Therefore,

this conceptual model illustrates the link between the corporate culture and organisational

performance, but there is no specific research on mission achievement. The literature tells us

that there is a link between corporate culture and organisational performance, but whilst this

link has been made, it is as yet unclear.

Hypothesis 1b: Corporate culture is positively correlated with financial performance.

Hypothesis 1c: Corporate culture is positively correlated with mission achievement.

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3.4 ICT Diffusion Innovation

The second antecedent of CCM relates to technology. Various research studies show benefits from using information and communication technology (ICT) such as ERP, CRM and intranet which is considered significant for creating competitive advantage (Jaworski and Kohli, 1993; McKee *et al.*, 1989; Papastathopoulou *et al.*, 2007; Weilbach and Byrne, 2010). It also important in reducing uncertainties surrounding production and administration processes (Dewett and Jones, 2001) and significant determinants of technical performance and productivity of R & D project teams (Allen, 1984; Pelz and Andrew, 1966; Sharma, 2012). Moreover, best practices companies are aware of the impact of technology on corporate communication and most are pioneering in innovative methods of technology use (Forman and Argenti, 2005).

Attewell (1992) divides his research into two metaphors of innovation diffusion research. First, the process of communication influences potential users by providing them with information needed regarding the new technology. Then, they are persuaded to adopt and use the technology (Rogers, 1983 cited from Attewell, 1992, p.2). In this context, the adoption is of an internally created or acquired new device, system, policy, programme, process, product, or service (Damanpour, 1991; Daft, 1982; Damanpour and Evan, 1984; Weilbach and Byrne, 2010; Zaltman *et al.*, 1973). Such an approach shows the patterns of adoption across an organisation's population, which reflects a pattern of communication flow. The second metaphor is an economic view, in which diffusion can be seen from the cost and benefit aspect. The impact on diffusion will be slow if the cost of the new technology is very high; however, if they perceive higher profit from the innovation, faster adoption will occur (Mansfield, 1968).

In practice, information technology (ICT) is an important tool as a channel of communication for organisations to send their messages to the various stakeholders. Therefore, the implementation of ICT innovations is crucial to organisational success, in terms of both the redirection and the integration of the organisation as a system (Wager, 1962) and for organisational effectiveness generally (Rogers and Agarwala-Rogers, 1976). Ineffective ICT implementation may cause several problems to the organisation such as cost and time over-

runs (Regan and O'Connor, 2000; Songer *et al.*, 2001), user resistance (Stephenson and Blaza, 2001; Villeneuve and Fayek, 2003) failure to achieve expected benefits (Gottschalk, 1999) and decreasing overall work performance (Murray and Mavrokefalos, 2000; Rojas and Songer, 1999).

In many organisations, the success of diffusion is measured by technology adoption and potential user factors towards technology. In the diffusion model, Rogers (1995) identifies technological characteristics (relative advantage, ease of use and compatibility), communication channels (mass media and personal communication), social system (type of user, leader opinion and culture issues) and diffusion rate as factors affecting innovation adoption. The rate of innovation diffusion in organisations depends on the first three factors (Rogers, 1995). However, these factors are static, and will be influenced by diffusion of innovation at the individual level (Peansupap and Walker, 2005).

In the context of an organisation, the categorisation of ICT diffusion innovation can be various. Factor analysis conducted by Peansupap and Walker (2005) found 11 factors influencing ICT diffusion innovation that were grouped into management, individual, technology and workplace environment categories. In line with existing studies and the perception of corporate communication managers towards ICT diffusion innovation, this research concentrates on management factors from the ICT innovation diffusion model. The three dimensions related to management factors of the model comprise supervisor and organisational support; professional development and technical support; and supporting tangible and intangible reward (Peansupap and Walker, 2005).

The literature review shows that management support is the predominant factor employed in implementing an ICT diffusion innovation strategy within the organisation (Lee et al., 2011; Senge *et al.*, 1999). Management should take advantage of the innovation's potential, and encourage employees to commit themselves to these new systems (Papastathopoulou *et al.*, 2007).

The second dimension is the feeling of organisational ambivalence by employees towards their professional development and technical support. For example, many employees comment on the limitations of time in learning the ICT applications. Thus, they believe that effective use of ICT application mainly depends on technical support provided by the organisation. Lastly, supporting the tangible and intangible reward dimension refers to organisational support for sharing knowledge and assisting ICT users (employees) in developing the learning environment.

3.4.1 The Relationship between Management Factors of ICT Diffusion Innovation and CCM

According to Argenti (2006, p.357) "corporate communication is being reformulated by unprecedented technology change" and radically alters the ways corporations interact with their constituencies (Ihator, 2004). Currently, corporations interact directly and indirectly to their stakeholders through various channels, for example a growing list of websites, blogs, online chat rooms, Facebook and twitter. In the context of corporate communication functions, usually the company is engaged with both internal and external stakeholders through investor relations, media relations, internal communication and employee relations, such that information technology becomes an important channel of communication. The next section discusses a relationship for both constructs.

First, corporate communication channels include not only traditional media, but also new media with a variety of features and more interaction that is websites and blogs. The advanced communication technology provides real-time discourse between companies and their stakeholders, replacing unidirectional messages from faceless managers (Argenti, 2006). Moreover, the main factors in company development in recent years are contributed to by the implementation of new information technology systems. Therefore, the management of the organisations have to react adequately to the challenge posed by their adoption of various technologies within their organisation to improve the communication system

Second, ICT is very important for organisations to disseminate their corporate information to the various stakeholders. Papastathopoulou *et al.*, (2007) believe that ICT innovation provides improvement in communication activities, especially with customers and investors. For example, technology is quite often used by organisations to inform, influence and remind

the customer about new products, or services offered by the company through corporate advertising. The new media of ICT such as the internet also could provide a big impact on the efforts to create effective investor relations (Deller *et al.*, 1999). This can save various costs such as printing and sending annual reports, proxy statements, quarterly reports, and dividend statements to the thousands or perhaps millions of shareholders (Harris and Sieder, 2001). The preparation and publication of all documents on the web site can reduce operating costs and increase communication efficiency. Therefore, the role of management in adopting ICT diffusion innovation impacts what technology, if any, is used or if used, in what way.

Third, the integration of technology with corporate communication functions can affect globalisation. The effects will influence the process of transferring information, thoughts or the emotional attitude of an individual or group to another individual or group (Theodorson and Theodorson, 1999) especially in an international communication context. Therefore, technology functions as a pattern for instrumental action to reduce any uncertainty occurring in the cause and effect relationships in an effort to achieve the desired goals of the organisations (Rogers, 1995). In this situation, the management's role is to understand the need of ICT diffusion innovation in communicating organisational messages to global stakeholders.

Fourth, empirically, Papastathopoulou *et al.*, (2007) find that the intra organisational diffusion of ICTs is a complicated process in various organisations that have a variety of needs, and also diverse criteria on innovations implementation in their workplace. There are challenges for management to choose the best ICT that can ensure the efficiency of internal communications. However, research has recognised ICT as being an effective catalyst for integration improvement (Mitev *et al.*, 1996; Yang *et al.*, 2013), team collaboration and enhancing construction communication (Anumba and Duke, 1997; Tam, 1999) within organisations. They also confirm that ICT, particularly web-based application, provides benefits to information services, computing management and communications for organisations.

Despite the importance of ICT within organisations, studies within corporate communication are limited at best, both conceptually (Argenti, 2006) and empirically (Pae *et al.*, 2002). A

further study has found that ICT is an integral part of the organisational communication landscape (van den Hoof *et al.*, 2005). In general, organisations are swift to adapt to ICT, especially for communication and marketing (promotional and advertising) purposes but no empirically tested in corporate communication. Taking into account the above discussion thus far, it is proposed that:

Hypothesis 2a: ICT diffusion innovation will have a positive effect on Corporate Communication Management (CCM)

3.4.2 The Relationship between Management Factors of ICT Diffusion Innovation and Mission Achievement

Few have explored the relationship between the adoption of innovation and performance (Damanpour and Evan, 1984; Damanpour *et al.*, 1989; Sharma, 2012). However, Damanpour and Evan (1984) believe that the adoption of administrative and technical innovations is more effective in helping organisations to improve their performance. Thus, by relating to this study, the relationship between ICT diffusion innovation and mission achievement also seems to be significant.

Due to technological changes, the process of transmitting a message is more sophisticated and gives more impact. ICT tools such as e-mail, websites, blogs and electronic forums are popular platforms for the organisation to cascade messages and become more important as a medium to enhance the organisation's credibility (Horton, 2001).

In this case, the communication channel (including ICT) is seen as an important tool for the organisation to send a message to the various stakeholders. Usually, the implementation of ICT innovations is crucial to organisational success in terms of redirection and the integration of the organisation as a system (Wager, 1962) and organisational effectiveness (Rogers and Agarwala-Rogers, 1976; Yang *et al.*, 2012). Regarding the more accurate contribution to effectiveness and performance, Damanpour (1991) suggests adopting multiple innovations in the organisation. This shows that ICT implementation has an impact on the organisation's performance such as mission achievement. In addition, many scholars also agree that

ineffective ICT implementation affects organisational performance, such as cost and time over-runs (Regan and O'Connor, 2000; Songer *et al.*, 2001); user resistance (Stephenson and Blaza, 2001; Villeneuve and Fayek, 2003); failure to achieve expected benefits (Gottschalk, 1999) and declining overall work performance (Murray and Mavrokefalos, 2000; Rojas and Songer, 1999). The above literature supports that of Owen *et al.* 's (2001, p.11) findings, in that it indicates that infrastructure such as technology supports and reinforces the vision, mission, values and strategies.

This study proposes that there will be significant correlations between ICT diffusion innovation and mission achievement.

Hypothesis 2b: ICT diffusion innovation has an influence on mission achievement

3.5 Corporate Leadership

A significant relationship between transformational leadership and organisational functioning exist (Avolio and Bass, 1987; Bass *et al.*, 1987; Waldman and Bass, 1987). For instance, within an organisation the leader plays a monumental role as an information provider to his or her subordinates at different levels (Andrews and Kacmar, 2001; Miles *et al.*, 1996; Schnake *et al.*, 1990; Varona, 1996). In addition, Allert and Chatterjee (1997) note that the leader should also be a good listener, communicator and educator in formulating and facilitating a positive organisational culture (p.14). The responsibility of leaders is to ensure that the overall vision of organisation is achieved. As prerequisites to make the organisational vision become a reality, the leader should have a skill of communication to build a vision of trust and enthusiasm for the future of the organisation. A theory of transformational and charismatic leadership emphasises emotions and values (Yukl, 1998), and implies that "leader and followers raise one another to higher levels of morality and motivation" (Burns, 1978, p.20).

Generally, a leader can be defined as a person who has the ability to inspire, motivate, and create commitment to common goals (Bass, 1997). Corporate leadership must show a willingness to take risks and to accept occasional failures as being natural (Kohli and

Jaworski, 1990). For example, in the business context, a leader has a responsibility to build trust within the organisation's corporate culture; this can be built initially from the communications ability of the leader by enhancing trust in interpersonal relationships, team building and organisational culture, internally and externally (Allert and Chatterjee, 1997).

There are many approaches to research in leadership, but transformational leadership has become a dominant approach (Bass, 1990; Bass and Bass, 2009; Chuang *et al.*, 2012). Transformational leadership is widely distributed in organisational settings that support the position suggested by House (1977), Oberg (1972) and Shils (1965). It is said that a transformation leader is able to broaden and elevate the interests of followers, generate awareness and acceptance among followers, and motivate followers to go beyond self interest for the good of the group (Bass, 1997). Along with the studies on CCM, leadership characteristics influence communication with and between employees. This represents an important extra dimension of leadership (Koene *et al.*, 2002).

Research has linked transformational leadership to other variables, such as employee commitment (Barling *et al.*, 1996; Lee *et al.*, 2012), job satisfaction (Koh *et al.*, 1995; Lowe *et al.*, 1996), organisational commitment and lower levels of job stress (Podsakoff *et al.*, 1996). The four dimensions of transformational leadership are:

- Charismatic Leadership: The leader instils pride and faith in followers by overcoming obstacles and confidently expressing disenchantment with the status quo;
- 2. Inspirational Leadership: The leader inspires followers to enthusiastically accept and pursue challenging goals and a mission or vision of the future;
- 3. Individualised Consideration: The leader communicates personal respect to followers by giving them specialised attention and by recognising each one's unique needs;
- 4. Intellectual Stimulation: the leader articulates new ideas that prompt followers to rethink conventional practice and thinking.

The main components are charisma/idealised influence and inspirational motivation, which entail serving as a charismatic role model and articulating a vision of the future that can be shared, and individualised which require leaders to pay attention to individual differences, as well as intellectual stimulation, defined as questioning old assumptions and the status quo (Avolio and Bass, 1995). The relationship between corporate leadership with CCM, financial performance and mission achievement constructs will be further discussed.

3.5.1 The Relationship between Corporate Leadership and CCM

Corporate leadership may affect CCM where several studies reveal the relationship for both variables. Oakland, (1993) for example, believes that good leadership is mostly about good communication. This means that management plays an important role in the formulation of corporate strategy (Dolphin and Fan, 2000) and they must be clear when transmitting details on strategic change. In addition, Kouzes and Posner (1987) urge corporate organisations to have good leaders to communicate their visions in many ways, including personal communication and written statements. Weber (1947) uses the term 'charisma' to define the extraordinary characteristic of a leader. A charismatic leader uses many mechanisms and tools appealing to senses and emotions, when communicating to subordinates (Takala, 1997). Based on previous research, as detailed above, leadership communication encompasses more than simply giving the correct message or information. The information must be clear, reach the correct people and be understood and convincing, valid and reliable (Takala, 1997). Furthermore, communication is seen as a process of sharing ideas, information, or attitudes between sender (leader) and receiver (subordinate) resulting in an amount of understanding (Lewis, 1980).

Many studies focus on the relationship between communication and corporate leadership (Hetland and Sandal, 2003; Nicoli and Ayoko, 2012; Oh *et al.*, 1991; Snyder and Morris, 1984; Takala, 1997). Nevertheless, few studies specifically focus on CCM and the link corporate leadership. First, leadership has a direct relationship with corporate communication in a cross-cultural study where many attributes are connected with transformational leadership (Den Hartog *et al.*, 1999). Attributes such as trustworthiness; communicative skill

and ability to encourage are commonly recognised as outstanding components of leadership (Hetland and Sandal, 2003).

Second, the relationship also appears in interpersonal communication. Oh *et al.*, (1991) studied the relationship between leader-subordinate interpersonal communication, subordinate satisfaction and project success with special emphasis on official and non-official communications. They define 'official communication' as formal, personal, vertical and instrumental communication, while 'non-official communications' as informal, personal, vertical and expressive communication. This study shows that the interpersonal communication ability of leaders is correlated with the leader's ability to use their discretion (Miraglia, 1963). Leaders with high discretion levels and abilities are more concerned with interpersonal relations and place more emphasis on enhancing their communication skills with their subordinates (Jablin, 1979; Redding, 1972). This finding is supported by Webber (1972) and Mintzberg (1973) which indicate 80 percent of typical managers use interpersonal communication in organisational management. This research relates to employee communication, one of the elements in CCM.

Third, besides interpersonal communication, Baird and Debolt (1976) find job satisfaction among subordinates to be positively correlated through communication contacts with the leader. They believe that subordinate satisfaction can be improved, in particular with an excellent supervision approach and when communication openness between leader and subordinates exists (Jablin, 1979). Supervision satisfaction contributes a positive relationship with many leadership types, because subordinates are inclined to admire a superior, regardless of their managerial style, who facilitates them to complete the job (Federici and Skaalvik, 2012; Locke, 1976; Snell *et al.*, 2012). Efficient transformational leaders, for instance, facilitate a good upwards communication contributing to a healthy working environment and profitability for the organisation (Hetland and Sandal, 2003).

Fourth, recently, specific communication competencies among corporate leaders are another strand of scholarship within organisational communication. The notion that communication competence leads to good performance, goal achievement and effectiveness are relevant and not new. For example, specifically in the communication setting, such as a military unit or

church organisations the emphasis is primarily on downward communication competencies with productivity (Lewis, *et al.*, 1982). In other areas of communication competence, individual performance perceptions are related to the competency of coping with information overload (O'Reilly and Roberts, 1977). As a result, competent leaders communicate better messages to their subordinate, and present a stronger performance (Garnett *et al.*, 2008).

Another important competence that a leader must nurture is trust. Initially, the ability of leaders to communicate is a key factor to build and enhance trust via team building, interpersonal relationships and organisational culture, internally and externally. Trust is never given, and must always be earned. One must always work hard to gain trust from people, employees and customers. According to Pincus and DeBonis (1994) a culture of trust is built, maintained and entrenched through an appropriately positive climate of corporate communication. To date, there is no solid literature on the relationship between corporate leadership on CCM. Taking into account the above discussion thus far, it is proposed that:

Hypothesis 3a: Transformational corporate leadership will have a positive effect on Corporate Communication Management (CCM)

3.5.2 The Relationship between Corporate Leadership and Organisational Performance

Today, a number of studies provide useful insights into the relationship between leadership and organisational performance to various organisational outcomes (Jacobs and Singell, 1993; Mulford *et al.*, 2008). Evidence indicates that transformational leadership behaviour positively influences organisational performance (Avolio, 1999; Bass and Avolio, 1994; Bass and Yammarino, 1991; Keller, 1992; Yammarino and Bass, 1990). For example, Howell and Avolio (1993) reveal that three measures (charisma, intellectual stimulations and individualised consideration) of transformational leadership are correlated positively to business unit performance over a one year interval. Furthermore, meta-analysis conducted by Lowe and Kroeck (1996) also confirms that transformational leadership is correlated with work unit effectiveness across different contexts. Both sets of research demonstrate similar

findings with Jaworski and Kohli (1993) that report strong or weak effects on business performance depending on environmental conditions, such as leadership style.

According to Jacobs and Singell (1993), the quantitative findings of leadership effects on organisational performance are diverse. First, the contextual effect of the research will influence the findings of the research. For example, research conducted by Lieberson and O'Connor (1972) indicates there are relationships between shifts in corporate chief executive officers (CEOs) and standard indicators of corporate performance (sales, net earnings, and profits) in the largest 167 firms over a 20-year period. However, when comparing the effects of shifts in CEOs to global measures of socioeconomic contexts, leadership effects are modest. Furthermore, Weiner and Mahoney (1981) replicate this study with different samples of large firms. Even though their method is different, their conclusions are identical to those of Lieberson and O'Connor (1972). The findings of both studies suggest that institutional or contextual effects matter more than shifts in CEO.

Secondly, different performance effects can be seen at individual or organisational level. Elenkov (2002) noted that leadership research has mostly focused on the impact of leader behaviour on the follower's individual performance and satisfaction, rather than organisation performance. While the effects of leader behaviour on individual employee performance are interesting, they do not capture the most important effects of these behaviours. In particular, the most important effects of transformational leader behaviour appear to be more superior to organisational performance, rather than improved individual job performance. An empirical study conducted by Elenkov (2002) finds that transformational leadership directly and positively predicted the organisational performance of Russian companies. As summarised, generally, qualitative and quantitative study has shown the relationship between corporate leadership and organisational performance.

Literature has established a relationship between a favourable corporate leadership and organisational performance. As has been iterated, transformational leadership concentrates more on comparing the transformational leadership effects on employee attitudes, satisfaction and job performance (Bass *et al.*, 1987; Waldman *et al.*, 1987). However, less attention has been paid to evaluating other key factors that may also directly or indirectly influence the

performance impact of transformational leadership on criterion variables. These may include financial performance and mission achievement. Research conducted by Avolio *et al.*, (1988) finds there are relationships between corporate leadership and financial variables (e.g. market share, debt to equity, return on asset, stock price and earnings per share). They find that transformational leadership is positively related to financial performance; this is also supported by Koene *et al.*, (2002) who examined the effects of different leadership style on two financial performance measures. Both findings give strong justification to the relationship of leadership with financial performance.

Although there is much research between leadership and other non-financial performance, research between leadership and mission achievements is limited, at best. One piece of research conducted by Owen et al., (2001, p.11) found leadership practices are congruent with vision, mission, values and strategies. Its findings are in line with others, such as Yammarino and Bass (1990), who believes the transformational leader is one who articulates an organisational vision and then shares it with his peers and subordinates. This action intellectually stimulates subordinates' behaviour, and the individual differences can be managed and it leads to organisational mission achievement. Meanwhile Elenkov (2002) adds in his research that leaders who display more charisma, individualised consideration and intellectual stimulations positively contribute to the achievement of organisational goals. Although the literature review did not reveal empirical evidence for the effects of considerations and initiating transformational leadership on mission achievement, research would expect these leadership styles to have positive effects and implications. The justifications of the hypothesis made are based on other factors of non-financial performance (for example, job satisfaction, productivity and commitment) that are positively significant on transformational leadership. Therefore, this study proposes the following hypotheses:

Hypothesis 3b: Transformational corporate leadership is positively correlated with financial performance.

Hypothesis 3c: Transformational corporate leadership is positively correlated with mission achievement.

3.6 Organisational Performance: Consequences of CCM

In common with other research, (for example, Capon *et al.*, 1990), the research described in this dissertation divides organisational performance into two sets of performance: (1) A dependent variable measuring financial performance; and (2) Nonfinancial explanatory factors. Financial performance variables include widely-used measured embracing levels, growth and variability in profit (typically related to assets, investment or owner's equity). For instance it includes measures such as *return on asset* (Bourgeois, 1980; Dess and Robinson, 1984; Rashid *et al.*, 2003), *return on investment* (Ansoff, 1965; Denison, 1984; Rashid *et al.*, 2003) *return on equity* (Pfeffer, 1972; Schellenger *et al.*, 1989; Vance, 1955, 1964), *sales* (Denison, 1984; Vance, 1955, 1964) and *market value* (Kim *et al.*, 1988).

Empirical research on financial performance has been conducted using several measures. For example, Peters and Waterman (1982) find that 36 American companies score an excellent performance on six performance measures such as compounded asset growth, average turnover growth, and average return of market to book value, average return on total capital, average return on equity and average return on sales. Meanwhile Rashid *et al.*, (2003) use three financial performance measures: Return on assets, return on investment and current ratio. Denison (1984), on the other hand, uses return on investment, return on equity and return on sales as a financial performance in his research on 34 companies across 25 industries in the US. In common with other research that also focuses on public listed companies (Rashid *et al.*, 2003; Denison 1984), the research described in this dissertation uses the three major indicators of financial performance consisting of return on assets (ROA), return on investment (ROI) and return on equity (ROE).

Table 3.4 shows the economic and financial variable to measure financial performance for 50 years. The justification for the use of the financial data (secondary data) in this study is discussed in detail in Chapter 4.

Table 3. 4: Economic / Financial variable for organisational performance

Scholar	Year	Variables	
Vance	1955	Net income, sales, owner's equity	
Vance	1964	Net income, sales, owner's equity	
Pfeffer	1972	Profit margin, return on equity	

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Schmidt	1975	Long-term debt to equity, payout ratio, current ratio		
Peters and Waterman	1982	Compounded asset growth, average turnover growth, average return		
		of market to book value, average return on total capital, average		
		return on equity, average return on sales.		
Denison	1984	Return on investment, return on equity, return on sales		
Lloyd et al.,	1986	Common stock returns		
Kesner	1987	Profit margin, return on equity, return on assets, earning per share,		
		stock market performance, total return to investor		
Kim, Lee and Francis	1988	Market value of outstanding equity shares, Price earnings ratio on		
		equivalent earnings per share ratio		
Schellenger et al.,	1989	Return on assets, return on equity, return on investments, total		
		market return on investment		
Hansen and Wernerfelt	1989	Industry profitability, firm's relative market share (compared to the		
		four largest competitors in each line of business), firm's market		
		share, firm's size		
Calori and Sarnin	1991	Return on investment ration, return on sales ratio, annual variation		
		of the net turnover		
Jaworski and Kohli	1993	Overall performance of the business unit last year, overall		
		performance relative to major competitors last year		
Rashid et al.,	2003	Return on assets, return on investment, current ratio		

Source: Developed for the study

Even though no financial performance (ROI, ROA and ROE) has been tested on CCM, other economic variables such as Advertising Value Equivalency (Chang and Abu Hassan, 2006) show the economic value of CCM.

Apart from financial performance, CCM also contributes to nonfinancial explanatory variables especially mission achievement (Blackmon, 2008; Niven, 2003; Owen *et al.*, 2001), job performance (Pincus, 1986; Pettit *et al.*, 1997), job satisfaction (Pettit *et al.*, 1997; Wheeless *et al.*, 1983), and employee productivity (Clampitt and Downs, 1993), environmental, strategic, and formal and informal organisational factors (Capon *et al.*, 1990). Some variables serve as both explanatory and performance characteristics; for example, some studies use sales growth as a performance measure, others use it as an explanatory measure (Capon *et al.*, 1990).

Non financial organisational performance measurement can be examined from three perspectives, namely, management, human resource and marketing. The variables to measure organisational performance in marketing relates to mission achievement (Blackmon, 2008; Niven, 2003), market share, product quality, sources of competitive advantage and industry structure (Porter, 1985). Deshpande *et al.*, (1993) use organisational innovativeness with the analysis embedded within the organisational culture framework for the management

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perspective, while the human resource perspective focuses on job performance (Pincus, 1986; Pettit *et al.*, 1997) job satisfaction (Pettit *et al.*, 1997; Wheeless *et al.*, 1983) and employee productivity (Clampitt and Downs, 1993). In line with other research (Blackmon, 2008; Niven, 2003) the research described in this dissertation uses mission achievement as a measurement for the non financial performance, the main reason being that mission achievement can measure the effectiveness of CCM activities in organisations.

In general, the objective of the organisational mission is to communicate the organisation's direction to stakeholders (Bartkus *et al.*, 2004). Despite the fact that corporate organisations operate in several contexts (non profit or profit organisation) missions are created to communicate an organisation's positive image to their respective stakeholders. For instance, Bart *et al*, (2001) suggest that the mission most likely to be correlated with employee satisfaction address specific issues such as the firm's purpose, values and strategy. As a result, the effective and enduring mission will reflect stakeholders' motivations for engaging in the company's activities (Niven, 2003). In other words, the mission achievements of the organisation are also a driving force in strategy and, ultimately, organisational performance (Kaplan and Norton, 2000; Niven, 2003).

Mission achievement measures are derived from the work of Blackmon (2008), based on her study of strategic planning and organisational performance. The scale captures performance data in four domains including mission achievement, customer processes, internal business processes and growth learning processes established in the Balanced Score Card framework by Kaplan and Norton (2000). 15 statements pertain to mission achievement itself, designed to access respondent opinion as it relates to their organisation's effectiveness at achieving its mission.

Table 3.5 shows the non financial variables of performance examined from the human resources perspective. CCM functions that involve internal and external environments are responsible to integrate the whole communication system of the organisation which can be a catalyst to the mission achievement.

Table 3. 5: Non-financial variable for organisational performance

Researchers	Variables	Type of Performance	Organisations	Respondent
Wheeless et al., 1983	Communication	Job satisfaction	Public sector	Supervisor
	satisfaction			
Pincus, 1986	Communication	Job performance	Hospital	Nurses
Clampitt and Downs,	Communication	Employee's	Service	Employees
1993	satisfaction	productivity	organisation and	
			manufacturer	
Pettit et al., 1997	Organisational	Job performance	Manufacturing	Employees
	communication	Job satisfaction	and multinational	
	(moderator)		company	
Blackmon, 2008	Strategic Planning	Mission Achievement	Non profit	Senior executive
			organisations	

Source: Developed for the study

Two concepts (market orientation and open communication) may be used to explain the proposed relationship between CCM and organisational performance. As mentioned by Kohli and Jaworski (1990) market orientation is "the organisation-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments and organisation-wide responsiveness to it" (p.6). These three components of market orientation concept show a relationship with communication, especially in disseminating the organisation's information to its stakeholders. A well planned communication strategy will help the organisation to achieve its goals.

Alternatively, knowledge transfer and open communication, according to communication theorists will minimise the lack of stakeholders' understanding and help avoid errors in misinterpretations and reasoning (Lawler, 1992). The concept of 'openness' is a common phenomenon examined in organisational research (Burke and Wilcox, 1969; Eisenberg and Witten, 1987; Hill and Baron 1976; Myers *et al.*, 1999). Generally, communication 'openness' is "one of the essentials of an effective organisation" (Rogers, 1987, p.53). Gudykunst and Nishida (2001) and Puck *et al.*, (2005) add that effective communication openness enhances the communication efficiency and, thus, is expected to have a positive effect on team performance. It also has a positive relationship with organisational performance, such as job satisfaction, information adequacy and role clarity. As a result, the communication openness (including CCM) can create a competitive advantage for organisations, and provide financial benefits such as ROI, profits, sales volume, market share

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and sales growth (Narver and Slater, 1990). Furthermore, Fryxell and Wang (1994) add that organisations with higher financial performance also rank higher in reputation.

Looking at the other general impact of communication on performance, research have tended to "measure global indicators of communication effectiveness, and satisfaction in terms of perceived impact on either organisational or individual performance" (Garnett *et al.*, 2008, p.267). This can be a benchmark to measure the role of CCM on the performance of organisations. More specifically, analysis from several field studies and other variables of performance such as efficiency, absenteeism and grievances has a relation with communication effectiveness (Tubbs and Hain, 1979). Pincus (1986) finds that an organisation's communication is related to job performance and supervisor performance, while Lull *et al.*'s (1955) study shows a definite relationship between communication and corporate productivity from the corporate president's perspective. In addition, Campbell's (1993) survey finds public relations is a primarily external structure of communication that significantly affects the bottom line. Through their survey, Pincus (1986) and Campbell (1993) assume the impact of communication on financial performance, but they have no specific data or evidence to judge its relationship.

In general, research on the relationship between communication and organisational performance focuses on a broad range of communication variables (Downs *et al.*, 1988) such as general communication effectiveness and specific communication behaviour effects. Effective corporate communications should be perceived more as an asset to be sustained (Stainer and Stainer, 1997); after all, every organisation is interested in finding out how it is performing. Previous study has not measured the relationship between CCM and specific organisational performance variables that is financial performance and mission achievement.

While no empirical study has been undertaken previously, based on communication research and other performance such as Advertising Valuation Equivalency (Chang and Abu Hassan, 2006), corporate productivity, (Lull *et al.*, 1955), satisfaction (Pincus, 1986) and team performance (Gudykunst and Nishida, 2001), many believe that both variables (financial performance and mission achievement) have a significant relationship with CCM. Taken together with the explanation above, it is proposed that:

Hypothesis 4a: Corporate Communication Management (CCM) will have a positive effect on financial performance.

Hypothesis 4b: Corporate Communication Management (CCM) will have a positive effect on mission achievement

3.7 Summary

In this chapter, a conceptual model (see Figure 3.1) has been drawn up, based on a review of the existing research in the fields of corporate communication, public relations, marketing communication, management communication, organisational communication, corporate leadership and organisational performance. Based on the literature subsequently discussed, three sets of antecedents pertaining to corporate culture, management of ICT diffusion innovation, and corporate leadership are hypothesised a being related to CCM.

Furthermore, there are three more hypotheses in the framework. First, it is proposed that there is a relationship between corporate culture and organisational performance. Second, it is proposed that there is a relationship between the management of ICT diffusion innovation and mission achievement. Third, it is proposed that there is a relationship between the corporate leadership characteristics and organisational performance. Finally, the proposed conceptual model also suggests that there is a positive relationship between CCM and organisational performance such as financial, as well as mission achievement.

In the following chapter, the research methodology employed for testing the hypotheses and answering the research questions is elaborated. In addition, the research design, including the research setting and development of the measurement scales is discussed. In the section of measurement scales development, the outcomes of a literature search, semi-structured interviews and a pilot study are reviewed in detail. Then, the data collection process for the main survey is presented before highlighting and explaining some issues concerning the data analysis.

CHAPTER 4: METHODOLOGY AND RESEARCH DESIGN

4.1 Introduction

This chapter starts by reviewing the research setting, measurement scales and process of data collection. More specifically, this chapter describes the philosophical stance, research strategies, and research design on which the study is based. The philosophical assumptions are the grounds on which research is built, and are empirically important. They ensure that research findings are coherent and sound. Furthermore, they help to justify the uses of methodology and method, and support the assumption regarding reality highlighted in this study.

4.2 Research Methodology and Research Design

4.2.1 Philosophical Foundation of Research

Even though method and methodology are always used interchangeably by a researcher, they are two different concepts. According to Payne and Payne (2004) research methods are used in social research as a specific technique in identifying research questions, gathering and analysing the data and presentation of the findings. Meanwhile, research methodology refers to a broader concept including a set of conceptual and philosophical assumptions that justify the use of the chosen method. Therefore, in empirical research, the philosophical foundation depends upon the epistemology, ontology, human nature and methodology. All of this relates to reality, the connection between reality and the researcher, and the techniques used by the researcher to discover the reality, respectively (Healy and Perry, 2000).

Epistemology means 'theory of knowledge' (Goldman (1993, 1999) which is the assumption about how people know things (Bernard, 2000, p.8). Lewis (1996) defines epistemology as "the systematic philosophical examination of knowledge" (p.549). Furthermore, epistemology is concerned with the behavioural study of social phenomena; it also focuses on the relationship between a researcher and the studied phenomena (Corbetta, 2003).

There are two dominant epistemological assumptions in social research: 'positivism' and 'interpretivism' (Baker, 2001; Bernard, 2000; Corbetta, 2003). The word 'positivism' refers to the philosophical stance that regards the world as being external to a researcher and consisting of phenomena that can be observed (Corbetta, 2003, p.14). Thus, the positivist believes that human experience will reflect the objective and independent reality which provides the foundation for knowledge (Weber, 2004). Subsequently, the researcher explains the phenomena by establishing appropriate theories and tests the hypotheses on how the phenomena will occur in the future (Blaikie, 2000; Hussey and Hussey, 1997; Payne and Payne, 2004). Therefore, theories will be improved through hypothesis testing against evidence. Deductive theory testing is associated with 'positivism'.

Conversely, interpretivism is concerned with a researcher's situation in a social context and intentionally builds through interpretation and individual interaction or a person's lived experiences (Baker, 2001; Bryman, 2001; Corbetta, 2003; Weber, 2004). Therefore, an interpretivist criticises the positivist approach by arguing that social reality is not objectively determined, but is socially constructed (Husserl, 1969). In addition, the nature of interpretivism places more emphasis on qualitative data value in a quest of knowledge (Kaplan and Maxwell, 1994) and providing contextual depth (Myers, 1997). However, the interpretivism approach has also been criticised because of its lack of validity, reliability and generalisability.

The ontological assumption in social research discusses how a researcher regards the nature and form of social reality. There are two major perspectives for an ontological approach: (1) realism and (2) constructivism. In general, realism involves the presence of external reality, including material objectives, laws, universals, propositions, numbers, probabilities, efficacious reasons, social structures and moral facts (May, 1997). Realism is categorised into two subgroups: 'naive realism' and 'critical realism'. Naive realism simply asserts by using an appropriate method to understand reality, while critical realists accept that there is no theory-neutral observation or interpretation (Danemark, 2002). Thus, reality is not neutral from this perspective. Both (naive and critical group) were influenced and have an influence on behaviour. For example, a person with a pre-existing idea and knowledge will influence reality. Then, using senses and knowledge, the observer will observe, interpret, describe,

assimilate and make sense of this reality. Based on this eventuality, the observer is enabled to take the appropriate actions.

On the other hand, the critical realist indicates that an entity is real if "it has causal efficacy, affects behaviour, and makes a difference" (Fleetwood, 2005, p.199). The critical realism paradigm also believes that the entity can be present independently of our knowledge of it (Fleetwood, 2005) and it is fallible and theory-laden (Sayer, 1992). However, critical realism includes certain ontological assumptions regarding the nature of reality that provide a clearer view of its nature. For example, it suggests that the world comprises events and objects, including structures with 'powers and liabilities capable of generating events' (Easton, 2002). Thus, social phenomena (e.g. institutions, actions, etcetera.) are dependent on the perceived concept. While critical realists believe that social phenomena exist without the researcher's interpretations, they still search for an explanation, not only the cause-effects, the underlying structures and generative mechanisms, but also to experience a phenomenon (Fleetwood, 2005).

Unlike, the existence of a prescribed reality advocated by supporters of realism, constructivists believe that theory is an act of generation, rather than a formalisation of underlying reality. Accordingly, constructivists argue that socially constructed reality (Guba and Lincoln, 1994) has no absolute reality, that is, the reality of a universal validity for all individuals. Instead, there are differing views among societies in the view and interpretation of social facts (Corbetta, 2003, p.24). Meanwhile, realists believe that our failure to understand the organisational or strategic reality is our lack of understanding of the functions of the phenomenon, constructivists believe that 'reality' is essentially the product of different contexts, perspectives, and sense-making mechanisms (Mir and Watson, 2001, p.1172). In conclusion, there are merits and criticisms on each paradigm, respectively. However, choosing the appropriate epistemology is fundamental to the nature of research (Saunders *et al.*, 2005).

In this research, the antecedence and consequence of corporate communication management (CCM) exist in the institutional environment as an internal reality. Structural relationships may be disclosed if the correct model is designed to capture them. This study attempts to

understand the relationship between CCM and it antecedents and consequences and the generative mechanisms underlying the relationship. Furthermore, positivism is the base of this research using elements of realism, such as the existence of social facts (Bryman, 2001). The approach of the positivist looks into explanation and prediction in a social world by searching for regularities and causal relationships between its elements (Burrell and Morgan, 1979).

This study takes a positivist perspective. The conceptual model presented in Figure 3.1 is used as a way to look at the findings of the study which is described and which creates regularities which can be generalised to the bigger environment.

4.3 Research Design

Research design is a research procedure planned by the researcher in order to answer the research question set (Saunders *et al.*, 2003). By its nature, research design entails the implementation of methodology, spatial location, industry, contextualisation and the selection of unit analysis.

4.3.1 Triangulation Approach

In general, triangulations mean "the use of two or more independent sources of data or data collection methods within one study in order to help ensure that the data are telling you what you think they are telling you" (Saunders *et al.*, 2003, p.99). According to Neuman (2003), triangulation can be categorised into four aspects: (1) triangulation of measures; (2) triangulation of observation; (3) triangulation of theory; and (4) triangulation of methods.

Triangulation of method or 'mixed method' (Tashakkori and Teddlie, 2003) is employed in this study. Methodological triangulation involves triangulating more than one type of methodology (Bryman, 2006), to enable the researcher to conclude whether an aspect of the phenomenon is measured appropriately. In other words, multiple methods can be used to investigate the phenomenon in one empirical research, and it will draw a different theoretical assumption (Moran–Ellis *et al.*, 2006). In this process, the data are collected both

qualitatively and quantitatively simultaneously or sequentially (Creswell, 2003). Then, the data are integrated or combined at some stage of the research.

Quantitative studies look for statistical explanations which describe regularities in human lives (Collis and Hussey, 2003) by testing the hypothesis to the broader population and generalising the findings (Saunders *et al.*, 2005). Meanwhile, qualitative studies try to understand the meanings that people attribute to different aspects of their lives (Silverman, 1993). Each methodology has specific weaknesses and also specific strengths. For instance, qualitative studies have been criticised by scholars (Barton and Lazarsfeld, 1955; Payne and Payne, 2004) because of their lack of generalisability, validity and reliability. To overcome this situation, the weaknesses of qualitative methods should be strengthened by quantitative, or vice versa. Integrating qualitative and quantitative methods can benefit by increasing the accuracy of research findings and the level of confident therein (Keele, 2001).

Sociological research has a long tradition in combining qualitative and qualitative methods and data in research design (Campbell and Fiske, 1959; Erzberger and Prein, 1997). The methodological debate for the last decade is about how to integrate both qualitative and quantitative methods in a single research. It can be accomplished, as suggested by Miller *et al.*, (2011, p.16):

"If the finding from one type of data can potentially modify and shape the collection of the other, findings are often best reported in that sequence, but with an additional section that integrates the findings, often organised by topic. Conversely, when quantitative and qualitative data are collected simultaneously, or when the data sets are collected to converge or triangulate findings, results might more logically be blended (with topics or constructs related from both quantitative and qualitative data)".

The triangulation method in this study is conducted in two main phases, starting with a qualitative study (semi-structured interviews). In this phase, the corporate communication practitioner has chosen to validate the measurement scale before the main survey is undertaken. For the second phase, a quantitative method (online survey) is employed to

investigate the antecedents and consequences of CCM from public listed companies. In other words, qualitative data is collected and analysed at an early phase, followed by quantitative data collection and analysis for the next phase (Creswell *et al.*, 2003).

4.3.2 Research Setting: Country and Industry

A successful research project is dependent on the selection of research setting (Baker, 1994). Research setting issues, especially where to conduct the research will limit the proposition generated from the theoretical model. For instance, its sets the frontier for generalisation, by constituting the range of theory (Whetten, 1989). Therefore, the selection of the research setting will help the researcher to take a note effectively on particular phenomena, to investigate the proposed theories and to draw a conclusion about the empirical test with confidence (Doktor *et al.*, 1991).

Malaysia is located in the centre of Southeast Asia, and is culturally different from most western countries (Hofstede, 1980). Hofstede's concepts of power distance and masculinity versus femininity dimensions have been used to examine cultural expectations of superior-subordinate dynamics. Compared to some countries such as Australia, the United Kingdom and the United States of America, organisational culture in Malaysia demonstrates high scores for power distance and masculinity-femininity dimensions (Hofstede, 2003). In addition, Hofstede illustrates Malaysia as more of a collectivist society in nature, meaning that the relationships among individuals are close and there is a greater tolerance for diversity. This shows a greater acceptance of paternalistic and autocratic leadership behaviour. Abdullah and Lim (2001) and Lim (2001) also find a similar pattern with Hofstede's works when examining these cultural dimensions in multiple, private and public organisations.

Since the 1970s, the industrialisation process in Malaysia has created many business and employment opportunities. In relation to foreign investment, back in early 1980, the Malaysian government nurtured home grown organisations in the automotive, electronics and construction sectors in order to stimulate the domestic economy. Subsequently, several organisations emerged as dominant industries in the South East Asia (SEA) region. For

example, in the automotive industry, PROTON, which is listed as a public company in Malaysia (a producer and manufacturer of the Malaysian national car), is the biggest and largest passenger car producer in Southeast Asia.

Moreover, Malaysian Incorporated Policy was introduced in the 1980s involving profitable government agencies such as Jabatan Telekom Malaysia (JTM) and Lembaga Letrik Negara (LLN). Most of these organisations are directly linked to the government and these organisations are referred to as "government linked corporations" (GLCs). These organisations are mainly involved in the telecommunications industry, aviation, energy and construction. The Malaysian government, through her investment arm, Khazanah Holdings, acquired 30 percent of prominent GLCs listed in the MSE, such as TM Berhad, Malaysia Airports Holdings Berhad, and Tenaga Nasional (Abdul Aziz, 1999). Recently, Malaysian GLC shave expanded their business to other countries such as Indonesia and Thailand. For example, PETRONAS has invested in more 29 countries, CIMB Bank and Maybank has started to compete in the banking sector in Indonesia and TM has had success in more than five countries. Malaysia is also a centre of 1,656 foreign subsidiary companies across 37 industries, and Malaysian managers have been employed to run companies throughout the region.

Malaysia has gone through various reforms. From being a middle-income country, Malaysia has transformed itself since the 1970s from a producer of raw materials (for example, rubber, tin and palm oil) into an emerging multi-sector economy. Malaysia recorded the highest GDP after Singapore in Southeast Asia and has grown more than five per cent per annum since 2006. From 2004 to 2008, Malaysia has developed five new economic corridors, namely, the Northern Corridor Economic Region (NCER), East Corridor Economic Region (ECER), Iskandar Development Region (IRD), Sabah Development Corridor (SDC) and Sarawak Corridor of Renewable Energy (SCORE) to stimulate economic growth and elevate income levels throughout the nation. The implementation of this vision is to ensure that these five corridors become world-class economic regions by 2025.

Malaysia is well established in the international economic arena. For example, she is ranked as the 15th most competitive trading nation in the world, and has hosted both the

Commonwealth Games in 1998 and is part of the second leg of Formula One Grand Prix since 1999. In 2010 the Prime Minister of Malaysia set up a new target to become a high income nation by 2020, under the Economic Transformation Programme (ETP). Several projects under the ETP have been announced which involve multi billion ringgit projects for next few years.

Companies listed on the Malaysia Stock Exchange (MSE) are chosen as the setting for this research. The MSE is an exchange holding company approved under Section 15 of the Capital Markets and Services Act 2007. It operates a fully-integrated exchange, offering a complete range of exchange-related services including trading, clearing, settlement and depository services. Certain considerations led to this choice. First, the use of these selected corporate companies provides financial performance data which are available to the public. Those that are not listed in the MSE are not made available to the general public (Rashid *et al.*, 2003). Second, PLCs under the MSE comprise more than 1,020 reputable companies representing various industrial sectors. This would allow meaningful cross-comparisons regarding their adoption of CCM. Third, these corporate companies are likely to be among the most advanced in Malaysia in terms of capitalising and practicing CCM, both internally and externally to their stakeholders. Practicing CCM as a strategic function would thus be a natural course of activities for these companies. Given these requirements, public listed corporate companies are used.

All the companies listed under the MSE may be divided into twelve sectors, namely: Consumer products, industrial products, construction, trading and services, technology, infrastructure project companies (IPC), finance, hotels, properties, plantation, mining, and real estate investment trust (REITS). Table 4.1 shows the number of companies under the MSE by sectors for Main Market and Ace Market. The Main Market integrates the main board and second board, while Ace Market is a new establishment of the revamped MESDAQ market. This new listing and equity fund-raising framework are aimed to create an efficiency access to capital and investments of the MSE, as well as making a more attractive platform for Malaysian and foreign companies.

Table 4. 1: The number of Malaysian public listed companies based on industries

No.	Sectors	Main Market	Ace Market
1.	Consumer Products	147	0
2.	Industrial Products	311	23
3.	Construction	70	0
4.	Trading and Services	116	16
5.	Technology	27	78
6.	Infrastructure Project Companies (IPC)	9	0
7.	Finance	45	2
8.	Hotels	5	0
9.	Properties	108	0
10.	Plantation	49	0
11.	Mining	1	0
12.	Real Estate Investment Trust (REITS)	13	0
	TOTAL	901	119

Source: Malaysia Stock Exchange (MSE)

According to Rashid *et al.*, (2003), public listed companies operate normally within a strong institutional environment, and this makes the institutionalised structure risky. Public listed companies in Malaysia are subjected to the regulations and professional standards imposed and suggested by the Ministry of Finance and Malaysian Securities Commission. Operating practices (for example, corporate governance) are regularly inspected by relevant government agencies such as The Companies Commission of Malaysia. The relationship between organisational legitimacy and CCM in this corporate company is thus expected to be clearly observed and measured.

In addition, public listed companies are public companies and the business in which they are involved relies heavily on various communication strategies to compete with other competitors to gain competitive advantage (van Riel, 1995). Malaysian public listed companies have to depend on mass media (electronic media, print media or new media) to communicate and publicise their company activities for customers' referrals. Companies in Malaysia have been commercialised and expanded very quickly. For example, in 1990 the number of companies listed in the MSE was 285 and this increased to 1,020 companies in 2009. Moreover, the recent development of business operations and the increasing competition in the Malaysian capital market led to a merger of big companies (e.g. CIMB Bank and Sime Bank) and acquisition of foreign companies by Malaysia (for example, Lotus Group and Bank Lippo of Indonesia).

Finally, public listed companies are identified by the Malaysian government as one of the strategic sectors, which can attract more foreign direct investment (FDI) in the near future. In 2008, foreign direct investment (FDI) in Malaysia totalled 12.9 billion U.S. dollars, an increase of 53.4 percent against the previous year. Malaysia's record of accomplishment as a destination for new investment has been recognised by many investors from the U.S., Europe and Japan (Department of Statistics, Malaysia, 2008).

4.3.3 Contextualisation Issues

Contextualisation is important in management research, especially in organisational behaviour, in that it can make the models more accurate and the interpretation of results more robust (Schneider, 1985). In general, contextualisation means "incorporating the context in describing, understanding, and theorising about phenomena within it" (Tsui, 2006, p.2). However, there are some contextualisation issues in management research that relate to this study. Tsui (2006) lists four types of contextualisation issues in management research to look for.

- 1. Contextualisation in choosing the phenomena to study
- 2. Contextualisation in developing the theory to explain the phenomenon
- 3. Contextualisation in measurement
- 4. Contextualisation in method

First, Tsui (2006) discusses the contextualisation of the phenomena from 'outside in' to 'inside out'. The term 'outside in' means that the researcher chooses a hot topic or phenomenon in the existing literature and tests it in the other context. For example, western literature has been used in the eastern context. This approach can identify the missing issues of management and organisation in the current literature when it adapts to the new context. Meanwhile, an 'inside out' approach means the researcher identifies important management issues in an eastern context even though such topics might be alien to a researcher outside this context. In this study, an 'outside in' approach is adopted and tested in a Malaysian corporate communication context.

Second, contextualisation in measurement means developing valid measures are required in every procedure (Hinkin, 1995) especially when developing a new measure in the new context. The researcher can use existing proven measures subject to accurate translation for valid measurement in a new context. Therefore, in this study, the English language is used during the qualitative and quantitative study, as suggested by Lim (2001). Furthermore, more serious attention to contextualisation is an 'indigenisation' or 'localisation' issue that has two levels. At the first level, the researcher must know how to 'localise' the Western-developed constructs into Malaysian contexts. This is very important, because the meaning of corporate communication constructs might be affected by social and cultural tradition. For instance, what is corporate communication management in Malaysia? In this study, the researcher interviewed 12 corporate communication practitioners to identify the definition of CCM from the local context. This step ensured a high level of construct validity of the research.

The second level of 'localisation' is the process of presenting a construct and its current definition to the Malaysian respondent because meaning is derived from context (Gergin, 1982). Following this, respondents were asked whether the construct can be related to the phenomena in their workplace. Semi-structured interviews were used to obtain information on behaviour or indicators from the respondents to the related constructs. The statements were judged by a corporate communication practitioner and academician. Then, the items were identified for each category and the written questionnaires developed for exploratory factor analysis and confirmatory factor analysis. The details of this procedure are discussed in Section 4.3.5.

Finally, contextualisation in method is given a different view on method approach. For example, Western scholars widely use paper-and-pencil survey, online survey, experiment, interviews and focus groups. The same approach was also used by Malaysian researchers. However, in Malaysia, given the nature/type of culture, responses to personal interviews or written surveys are dealt with in a different manner. Malaysia is categorised as a high context culture, sensitive to social environments and possibly susceptible to social cues. Therefore, the study on current data gathering and observation method is required to determine the necessity for contextualisation in research. In the Malaysian context, researchers have to

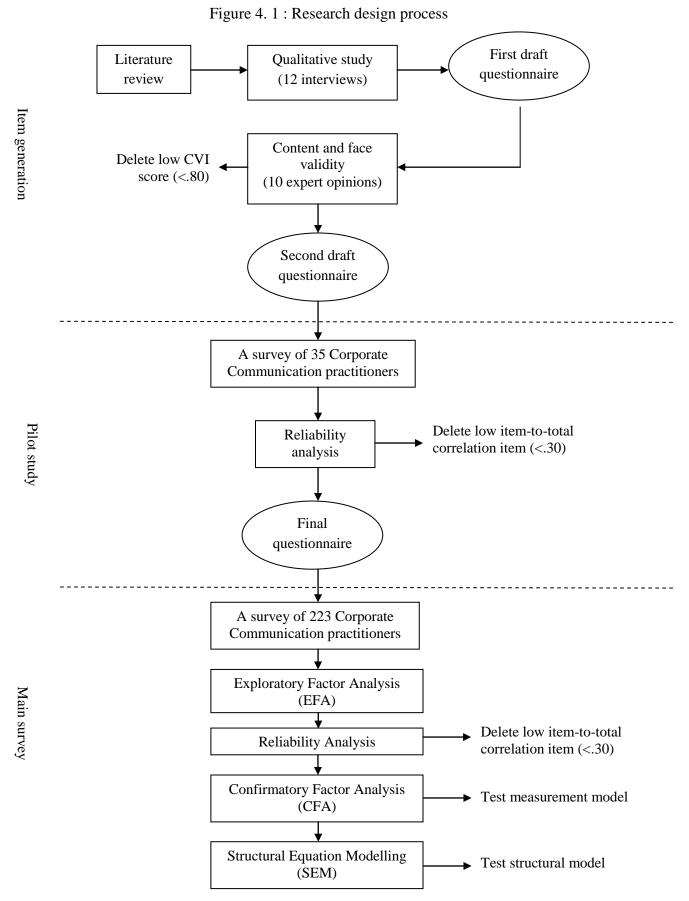
understand the methods used in Western literature before they imitate it into their research. By considering the Malaysian culture with some modification in terms of method, the current tools should facilitate the creation of new methods.

4.3.4 Unit of Analysis

The unit of analysis of this study for both qualitative and quantitative stages is the company, as suggested by Forman and Argenti (2005) data collection has to be completed at the individual level (managers). Questionnaires were distributed to the corporate communication and public relations manager of the public listed companies in order to measure the company's CCM and its relationship with other constructs (corporate culture, ICT diffusion innovation, corporate leadership and mission achievement). Further details regarding the data collection method will be discussed later in this chapter.

4.3.5 Developing the Measurement Items

Development of the instrument is carried out in four stages, as suggested by Churchill (1979). The first stage is item creation, the purpose of which is to create a pool of items by identifying the item from existing scales. The second stage involves interviews with corporate communication practitioners and consultants to ensure the items gathered from literature are in line with the context of study. At this stage, additional items appear, and need to be added to the existing scale. The third stage involves the process of scale of content and face validity. As will be described more fully in subsequent sections, the basic procedure was to have panels of judges confirm the validity of items based on the representativeness and clarity of the items. Based on their placement items with a low score could be eliminated. Finally, the combination of various scales after the content and face validity processes were ready for the instrument testing stage. The instruments (questionnaire) were distributed to a small sample of respondents to gain an initial indication of the scales' reliability. From the results, each item which did not contribute to the reliability of scales was culled and then field test of the instrument was carried out. The following section describes each of the steps in detail.



4.3.5.1 Stage 1: Item Creation

The main objectives for an extensive literature review search are to investigate the domains of measurement scales and generate items for each. This study uses existing scales for measuring corporate culture, ICT diffusion innovation, corporate leadership and mission achievement constructs from various academic journals. However, these measurements were modified and empirically tested to fit the research frameworks. Scales for the CCM constructs included in the study are not readily available in the literature. Therefore, the imperative first step entailed the development of new scales for these constructs.

First, all items identified in the existing literature were categorised according to the various CCM which they were originally intended to address. Literature search is the main technique employed to accomplish the step. In particular, existing scales were reviewed and related domains and items were extracted from various marketing and management journals such as Corporate Communication: An International Journal, Journal of Marketing Communication, Management Communication Quarterly, and Academy of Management Journal. This step generated an initial pool of items for each facet of CCM. Next, items considered to be too specific in focus and relevant only in particular situations or to particular industries were culled.

Van Riel (1995) identifies three domains for corporate communication (organisational communication, management communication and marketing communication). However, Marion, (1998) and Will *et al.*, (1999) classify corporate communication into two domains (internal communication and external communication). Based on past articles the domains of all concepts are classified in many ways. Whilst not exhaustive, the domains of constructs in this research are identified and integrated as concisely as possible. Section 2.2.5 discusses the six detailed domains of CCM. A more complete list of the six categories is shown in Table 4.2.

Table 4. 2: Examples of domains and items of constructs in extant literature

Construct	Examples of Domains and Items	References
Corporate	Managing Corporate Advertising	
Communication	We promote our corporate identity through corporate	Argenti 1996;
Management	advertising.	Goodman, 2000; van
	• We communicate the brand identity to be congruent with	Riel, 1995; Will et al.,
	the brand image through corporate advertising.	1999
	• We are responsible to design all corporate visual identity	
	(e.g. logo, slogan or typography) for our company.	
	We developed our own content for corporate advertising and other advertisement materials.	
	and other advertisement materials.	
	Managing Public Affairs	
	We manage the issues related to our products / services and	Shelby, 1993; van
	create a mutual understanding between organisation and	Riel, 1995
	stakeholder.	
	We align organisational activities with external expectation	
	and meet the industry regularity requirement.	
	We help organisations to understand the issues management and strategically adopt to organisational public policy.	
	and strategically adapt to organisational public policy environment.	
	chynolinene.	
	Managing Public Relations	
	We are responsible to produce publications for the company	Goodman, 2000;
	(e.g. newsletter, company profile and corporate brochures).	Kitchen, 1997;
	We manage regular communication or function as liaison	Marion, 1998; Shelby, 1993; van Riel, 1995;
	with various stakeholders.	Varey, 1997
	We organise the Corporate Social Responsibilities (e.g. sponsorship, charities and education) programme for	, 410), 1337
	stakeholders engagement and participation	
	We control the content of electronic publication (e.g. e-	
	newsletter, electronic press releases and corporate website)	
	for our company.	
	We organise external events (e.g. awareness campaign,	
	trade exhibition and product launch) to keep board members	
	and employees engaged with external stakeholders.	
	We develop and implement communication policies in our	
	ompany.Our work includes speech writing, translations and a	
	documentation process for various important documents.	
	r	
	Managing Media Relations	
	We undertake special media interviews to create awareness	Argenti, 1996;
	and literacy programmes about our business activities.	Goodman, 2000; Will
	We are responsible to address media needs and concerns professionally at any time.	et al., 1999
	professionally at any time.We archive and manage all photographs and video related	
	to our company for future use.	
	We are responsible for press release and media conferences	
	if necessary.	
	Managina Insurator Policia of Figure 1.1 C	
	Managing Investor Relations/Financial Communication We work with the company secretary to organise an appual	A
	We work with the company secretary to organise an annual general meeting where the company will announce the	Argenti, 1996;
	annual financial results to the shareholders.	Goodman, 2000; van Riel, 1995; Will
	We work closely with the finance department to prepare the	et al., 1999
	,r.r.r.r.r.r.	C. Civi, 1777

annual report and quarterly financial report. • We provide information and manage relationships with the investors through various programmes (e.g. investor relations programme and annual general meeting). • We create a positive context and better perspective on financial data to show the positive performance of the company. Managing Employee Communication Argenti, 1996; • We provide training (e.g. communicate to the public and Goodman, 2000; understand the public needs) at a lower level up to the Kitchen, 1997; highest level to build internal branding for the company. Shelby, 1993; Varey, • We assist HR to explain key initiatives the company is 1997; Will et al., 1999 taking and manage change on a regular basis through dialogue in the organisation. • We manage internal communication (e.g. newsletter, town hall or face to face) which is a process of cascading the company's internal guidelines, internal principles and vision to the employees.

Table 4.2: (cont.) Examples of domains and items of constructs in extant literature

Construct	Examples of Domains and Items	References
Construct Corporate Culture	 Examples of Domains and Items Consensual culture (4) My organisation is a very personal place. It is like an extended family. People seem to share a lot of themselves. The head of my organisation is generally considered to be a mentor, sage, or a father or mother figure. The glue that holds my organisation together is loyalty and tradition. Commitment to this firm runs high. My organisation emphasises human resources. High cohesion and morale in the firm are important. Entrepreneurial (4) My organisation is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks. The head of my organisation is generally considered to be an entrepreneur, and innovator, or a risk taker. The glue that holds my organisation together is a commitment to innovation and development. This is an emphasis on being first. My organisation emphasises growth and acquiring new resources. Readiness to meet new challenges is important. Bureaucratic (4) My organisation is a very formalised and structural place. Established procedures generally govern what people do. 	References Adapted from original items from the study by Deshpande and Farley, 1999
	 resources. Readiness to meet new challenges is important. <u>Bureaucratic (4)</u> My organisation is a very formalised and structural place. Established procedures generally govern what 	
	 a coordinator, an organiser, or an administrator The glue that holds my organisation together is formal rules and policies. Maintaining a smoothly running institution is important here. My organisation emphasises permanence and stability. Efficient, smooth operations are important. Competitive (4) 	

My organisation is very **production oriented.** A major concern is with getting the job done, without much personal involvement. The head of my organisation is generally considered to be a producer, a technician, or a hard-driver. The glue that holds my organisation together is the emphasis on tasks and goal accomplishment. A production orientation is commonly shared. My organisation emphasises competitive actions and achievement. Measurable goals are important. Additional item from Rashid et al., 2003 (4) • My organisation believes that teamwork, participation and consensual decision-making will lead to the success of the organisation. My organisation has the stories of heroic deeds as part of the organisation's culture. These heroic deeds are also considered part of doing the job. My organisation's members highly value standardised goods and customer service.

My organisation does not emphasise social relationship

Table 4.2 (cont.) Examples of domains and items of constructs in extant literature

among workers.

Construct	Examples of Domains and Items	References
ICT Diffusion	Professional development and technical support (10)	Adapted from original
Innovation	I am confident the ICT tools that we are expected to use	items from the study
	here have the necessary levels of functionality to	by Peansupap and
	motivate me to use them.	Walker, 2005
	• I am given enough quality of training for learning about	
	and applying the ICT tools that I am expected to use here.	
	• I am given enough time for training for learning about	
	and applying the ICT tools that I am expected to use here.	
	• I am given enough flexibility in my job demands (in	
	terms of rescheduling daily demands and activities and so	
	on) to learn how to apply ICT tools that I am expected to	
	use here.	
	Our work procedures support our capacity to use the	
	ICT tools that I am expected to use here.	
	• I have been given sufficient time to think about how I can	
	best use ICT tools that I am expected to use here.	
	Organisational technical support is sufficient (e.g., help	
	desk, and getting software operational) to allow me to	
	learn about and apply ICT tools that I am expected to use	
	here.	
	Mentoring support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is sufficient to allow me to learn A support is support is support in the support in the support is support in the support	
	about and understand how to effectively apply the ICT	
	tools that I am expected to use here.	
	• I was given the opportunity to trial and experiment ICT tools that I am expected to use here	
	=	
	The result/benefit of using ICT tools that I am expected to use here were easy to observe.	
	Supervisor and organisational support (5)	
	My immediate supervisor encourages me to learn about	
	and/or apply ICT tools that I am expected to use here.	
	and/or apply 1C1 tools that I am expected to use here.	111

• I enjoy learning from others about applying ICT tools that we are expected to use here.
• I can trust my immediate supervisor that if I make some
mistakes when first getting to grips with ICT tools that I
am expected to use here I will not be blamed and pressured when learning and practicing these tools.
 My immediate supervisor in my organisation is open to suggestions on improving the way that ICT tools that I am
expected to use here are used.
Our organisation supports our ability to share experience
of ICT tools that I am expected to use here.
Supporting tangible and intangible reward (4)
• Our organisation provides tangible rewards (bonus,
promotion, and so on) to those who share ideas and
experience about ICT tools that I am expected to use here.
• Our organisation provides intangibly rewards
(recognition, thanks or public praise) to those who share
ideas and experience about ICT tools that I am expected
to use here.
• I receive tangible rewards (advancement, additional pay,
security, or better job prospects) from using ICT tools that
we are expected to use here.
• I receive intangible rewards (respect, admiration, self
fulfilment, feel good about myself) from using ICT tools
that we are expected to use here.

Table 4.2 (cont.) Examples of domains and items of constructs in extant literature

Construct	Examples of Domains and Items	References
Corporate	Idealisation influence or charisma (3)	Adapted from
Leadership	He/she makes me feel good to be around him/her.	Multifactor
	• I have complete faith in him/her.	Leadership
	• I am proud to be associated with him/her.	Questionnaire – MLQ
	Inspiration motivation (3)	(Bass and Avolio,
	He/she expresses with a few simple words what I could	1994) cited in
	and should do.	Northouse, 2004
	He/she provides appealing images about what I can do.	
	He/she helps me find meaning in my work.	
	Intellectual stimulation (3)	
	He/she enables me to think about old problems in new	
	ways.	
	 He/she provides me with new ways of looking at 	
	puzzling things.	
	He/she gets me to rethink ideas that I had never	
questioned before.		
	Individual consideration (3)	
	He/she helps me to develop myself.	
	He/she lets me know how he/she thinks I am doing.	
	He/she gives personal attention to others who seem	
	rejected.	

Table 4.2 (cont.) Examples of domains and items of constructs in extant literature

Construct	Examples of Domains and Items	References
Financial	Return on assets	Bourgeois, 1980; Dess

Performance		and Robinson, 1984; Rashid <i>et al.</i> , 2003
	Return on investment	Ansoff, 1965; Denison, 1984; Rashid <i>et al.</i> , 2003
	• Return on Equity	Pfeffer, 1972; Schellenger et al., 1989; Skaggs and Youndt, 2004; Tsekouras et al., 2002; Vance, 1955, 1964

Table 4.2 (cont.) Examples of domains and items of constructs in extant literature

Construct	Examples of Domains and Items	References
Mission	Our mission is used to monitor performance	Adapted from original
Achievement	Our mission is used to make decisions	items from the study
	I understand how my job helps to achieve our mission	by Blackmon, 2008
	Our mission statement helps me to understand how my	
	organisation sets priorities	
	Strategy is important to our mission	
	Our strategy is achievable	
	My day to day duties help us to achieve our mission	
	My co-workers' day to day duties help us to achieve our	
	mission	
	Our mission is the driving force for this organisation	
	Our organisation's actions are consistent with our mission	
	Our organisation's action are consistent with our vision	
	Our organisation's actions are consistent with our core	
	values	
	We consistently meet the foundation for performance	
	established in our mission statement	
	We consistently meet the criteria for performance	
	established in our vision statement	
	We consistently meet the criteria for performance	
	established in our values statement	

Source: Developed for the study

Unlike CCM, corporate culture constructs have been operationlised in many ways by various authors. In this research the measurement was based on Deshpande and Farley (1999) works, which identified four dimensions for corporate culture (consensual culture, entrepreneurial culture, bureaucratic culture and competitive culture). Competitive culture includes values relating to demanding goals, marketing superiority, competitive advantage and profits. Entrepreneurial cultures emphasise innovation, high level dynamism, risk taking and creativity. In a bureaucratic culture, values like formalisation, standard operating procedures, rules and hierarchical coordination are examined which include predictability, efficiency and

stability for the long-term. Finally, consensual culture such as elements of tradition, loyalty, extensive socialisation, personal commitment, teamwork, self-management and social influence are important in the organisational values. Examples of items are presented in Table 4.2.

ICT diffusion innovation has been operationalised in many different organisational contexts. A literature review conducted by Gordon *et al.* (1975) on organisational innovation elicited more than 2,000 items, while, Kelly and Kranzberg (1978) find more than 4,000 items in their analysis on technology innovation. This study adopts the items from Peansupap and Walker's (2005) research. Based on the literature review, they developed 46 items and find 11 factors to affect the ICT diffusion innovation in organisations. Although, these factors can grouped into four main areas (for example, management, individual, technology and environment) their effects can be measured at both individual and organisational levels. ICT diffusion innovation at the individual level such as technology characteristic, and communication channel shows static effects. In contrast, there are dynamic effects on management factors which are suitable measures to adopt for this study. The review of the literature has shown management factors supporting the implementation of ICT diffusion innovation strategy in organisations are professional development and technical support; supervisor and organisational support; and supporting tangible and intangible reward (Peansupap and Walker, 2005).

Based on a transformational and charismatic leadership scale (Bass and Avolio, 1990; Tepper and Percy, 1994) this research classifies the concept of corporate leadership into four domains: Charismatic leadership, inspiration leadership, individualised consideration; and intellectual stimulation (as described in more detail in chapter 3).

Mission achievement, which is the construct in the model suggested by Kaplan and Norton (2000) and Niven (2003), is a focal point for a Balanced Scorecard (BSC) in non-profit organisations, analogous to the profit motive in for-profit organisations. The original BSC Organisational Performance Scale developed by Kaplan and Norton (1992) has three domains which include the internal business process and growth and learning process, and traditional financial measures. However, Blackmon (2008) inserts mission achievement as a part of BSC

measurement in her research. Therefore, this research adopted 15 items of Blackmon's (2008) mission achievement measurement. Most of these items were adopted from research of Owen *et al.* (2001).

Another construct in the model is financial performance, found in much literature on financial performance. A number of financial ratios, including return on asset (ROA), return on investment (ROI) and return on equity (ROE), were gathered from the financial reports of public listed companies found in Datasream (Thomson Reuters). Performance data in all cases refer to the entire corporation listed on the MSE.

This study used the accounting-based profit ratio, and shows the combined effects of liquidity, asset management and debt on operating results (Brigham and Houston, 1998). ROA is derived from a company's profitability to a fiscal year's earnings divided by its total assets, and expressed as a percentage. Meanwhile, ROI is attained from a corporation's profitability relative to a fiscal year's income divided by common stock and preferred stock equity plus long-term debt. ROE indicates how profitable a company is by comparing its net income to its average shareholders' equity. Financial performance was chosen because it could be influenced by CCM. Section 4.4.3 discusses the details for the justification to use secondary data in this research.

4.3.5.2 Stage 2: Interview (qualitative data)

Following the literature search, semi-structured interviews were conducted in March 2010 with corporate communication practitioners. The researcher extracted items from interview data by using data reduction and display functions in Nvivo 9 software (Miles and Huberman, 1994). A coding scheme was designed based on literature and transcripts. Data were grouped according to relevant codes. Items were subsequently drawn from each group and compared with those obtained from literature. The profile of interviewees and details about interviews are as follows:

Table 4. 3: Profile of interviewees (practitioners and consultants)

Interviewee	Position	Institution	Duration (minutes)	Interview Date
1	General Manager Corporate Communications	Company 1 (Trading/Service)	64	11 March 2010
2	Head, Regional Communications	Company 2 (Trading/Service)	64	15 March 2010
3	General Manager, Corporate Affair Division	Company 3 (Trading /Service)	40	15 March 2010
4	Public Relations Manager	Company 4 (Trading /Service)	45	16 March 2010
5	Group Advisor	Company 5 (Corporate Communication Consultant)	56	17 March 2010
6	Managing Director	Company 6 (Corporate Communication Consultant)	37	22 March 2010
7	Head, Corporate Communications	Company 7 (Trading /Service)	72	23 March 2010
8	Director	Company 8 (Corporate Communication Consultant)	47	25 March 2010
9	General Manager, Corporate Communications Division	Company 9 (Trading/Service)	30	26 March 2010
10	Head of Communications	Company 10 (Infrastructure Project Companies)	33	29 March 2010
11	Senior Manager, Corporate Communications	Company 11 (Trading/Service)	31	30 March 2010
12	Manager, Corporate Communications Division	Company 12 (Industrial Products)	74	30 March 2010

Source: Developed for the study

Twelve (12) corporate communication managers and consultants were used as respondents in the item generation for three main reasons (Table 4.3). First, they were a group of respondents with extensive experience in corporate companies and could represent the CCM practitioner in Malaysia to provide information about different aspects of concepts in the study. Second, although corporate communication managers were selected from limited industries, they were particularly literate and could effectively verbalise the definitions and the scopes of difficult and technical terms from the various industries. This facilitated the generation of measurement domains and items. Finally yet importantly, the corporate communication manager was an important company spokesperson who was easily accessed and could be approached with follow-up questions if necessary.

From the interview, the majority of respondents agreed that managing corporate advertising is the one of CCM dimension. One interviewee [practitioner #3] discussed about important aspects of a corporate advertising as follows: 'Corporate advertising is also under corporate communication and it is now positioned under external communication. [...] Currently

advertising is being parked under our brand unit'. While, the second dimension of CCM also important to the organisations as mentions by interviewee [practitioner #7] in particular referred to the situation when the public affairs should be managed properly: 'it is important when the relationship with the government is not up to the mark'.

Public relations are central to CCM and this is widely discussed by the respondents in this research. Most respondents agreed public relations should focus on awareness programmes (for example, campaign, CSR and community relations). One interviewee [practitioner #10] said: 'we have CSR activities that are on-going throughout the year. Meanwhile one PR practitioner [practitioner #4] added: 'We do community relations, we help needy persons... [...] also in the way we are trying to build up a good image of the company that we care'. Same to media relations, the majority of respondents confirmed that media relations must be made as one of many important activities planned by corporate communication departments. One of the corporate communications practitioners [practitioner #12] insisted: 'we have already five media programmes... [...] .. it is just to build a relationship with the media.' While another respondent [practitioner #4] pointed out: 'media is another channel that you should make use of to get your message across'.

Moreover, all the respondents believed that managing investor relations activities is vital. One respondent [consultant #5] commented: 'A PLC has an obligation to announce its financial results and we do that every quarter... [...] because everything you do has an impact on interest of stakeholders, in particular your shareholders.' His statement is supported by another interviewee [practitioner #2] who stressed how to communicate to investors: '[...] you explain your performance to investors... [...] give them an indication that you're in the better position. This is all about building confidence with the stakeholders.'

Finally, the employee communication is confirmed by the respondents as an important dimension of CCM. One respondent [practitioner #4] stated: 'one of the activities is talking about reducing unionisation'. In addition, one respondent [consultant #6] highlighted the importance of creating a good employee communication programme: 'if the internal people are very happy and naturally they will talk well about an organisation... [...]'. The interviews

also sought to reveal items which surfaced during the discussion and were added to measure CCM.

Table 4. 4: New items generated from interviews (CCM)

I able 4. 4. New Items generated from filterview (CCN) Items generated from the interview (qualitative) Sample quote	
Items generated from the interview (qualitative data)	Sample quote
We manage the advertisements, marketing and promotion (AMP) programme for the company's brand positioning.	 We call it AMP which is pure communication. #Practitioner 2 Corporate advertising is currently being parked under our branding unit. #Practitioner 3 Brand awareness also comes under corporate communication – the advertisement part. #Practitioner 12
We have regular dialogues with the government agencies (e.g. Matrade, Mida and Security Commission) related to our business.	• We did regular dialogue with Matrade, Mida, Customs, Immigration, and Police that related to our business. #Practitioner 7
We try to build a good image of the company through community relations (for example, open day, Hari Raya event and recycle campaign) activities.	 The programme for external stakeholder also is being charged or is being implemented by the corporate communication side. So, it is an awareness programme. #Practitioner 12 We have CSR activities and we also have on-going liaison spinning. We do participate in their local activities like they have an annual gathering, Chinese New Year or Raya event. #Practitioner 10 We do community relations. We help needy persons also in the way we are trying to build up a good image of the company that we care. #Practitioner 4
We participate in conferences and seminars locally and internationally to promote and create awareness about our company.	We also participate in conferences and seminars internationally. So, at conference you prepare a strategic paper then that gives you a whole awareness, publicity brand present in the mind of stakeholder. #Practitioner 7
We organise media programmes (e.g. media night or golf with media) to build a relationship with the media.	 80 percent of our responsibility falls to media management. #Practitioner 12 We also do lots of special media focus interviews. #Practitioner 10 We do a media literacy. #Practitioner 1
We manage statutory communication (e.g. merger and acquisition or new CEO appointment) to Bursa Malaysia before releasing the information to the public.	You have to tell the Sock Exchange if you want to buy a new company or a new company is buying you or your CEO is resigning. You cannot tell everybody first until you tell the security commission. It we call statutory communication. #Practitioner 2
We help the company create open communication within the organisation during a particular crisis (for example, sales drop, economic down turn or merger and acquisition) When the company create open communication within the organisation during a particular crisis.	 We undertake internal communication through our online bulletin. #Practitioner 1 We have a dialogue session with HR and the workers on a regular basis whereby the employees who may have some issues have their opportunity to come and talk to HR people about such issues. #Practitioner 7 Internal communication is created very carefully together working with HR. #Practitioner 9
• We organise internal events (e.g. family day,	So what I did based on gap analysis is devise a

workshop or boot camp) to stimulate a team spirit and motivate them toward the company's vision.

- programme. The first is to organise regular family days. #Practitioner 7
- We have like face to face (town hall) with employees. #Practitioner 1
- Corporate communication is simply a supportive role to HR either doing newsletter, family day or internal public activities. **Practitioner 8**

Source: Developed for the study

Corporate culture plays a critical role in forming an organisation communication system. According to Deshpande and Farley, (1999) corporate culture can be categorised into four dimensions, namely: consensual, entrepreneurial, bureaucratic and competitive. All four have an impact on the CCM in the organisation. Therefore, results from interviews provide some evidence for the measurement of corporate culture.

Consensual culture is generally associated with loyalty, tradition and internal focus (Deshpande and Farley, 1999). One respondent [consultant #5] gave mixed views on this category: '[...].is interesting but can be dangerous... [...] it doesn't provoke the company to take a serious look at itself. [...].. the danger everybody in the company is a yes man. [...] if you allowed this culture to be the mainstream culture then it is going and doesn't serve the purposes for the company'. The respondent believed that for the public listed companies such a culture will affect the performance of the organisation. While another respondent [consultant #8] shared similar views: 'I don't like consensual. I have work with Japan Airlines and it takes a bloody long time to get decisions. It makes you look so indecisive in today's age, but it's good in a sense when things go wrong it's collective'.

Entrepreneurial culture is important considering the business landscape and environment. For instance, one interviewee [consultant #5] pointed out: '[...] for the company that is operating within business you need to instil the entrepreneur spirit. So, the people know, we are here not to have fun, we are here to run the business... [...] you are responsible to stakeholders.... [...] you can be innovative and very active in promoting your businesses'. However, there are various points of view on bureaucratic culture that is characterised by internal regulations and formal structures. One respondent [consultant #5] argued: 'Bureaucracy, I think is much related to government organisation. [...] the junior officer will never dare to do anything without approval from the immediate boss'. However, a bureaucratic culture also exists in

the business environment in Malaysia as one interviewee [practitioner #4] pointed out: 'Before you determined that, I already have in mind that this company is very much tied Chinaman kind of bureaucracy. The company has a rule and I think that basically the rule has been set by management and top down. I think that hardly any staff has a chance to give feedback'.

In addition, some respondents also believe that the competitive culture does not have a strong impact on the corporate communication department. The interviewee [practitioner #12] elaborated on this situation: '[...] once they assign something to you in the communication department they expect you to carry out your task, there should be no such thing as competition from another division. [...] they have role to play and there is no crisscrossing competitive culture'. Her opinion is supported by another respondent [practitioner #10] who thought that the work culture in corporate communication itself does not have any space for competitiveness: 'I have my own job scope. I don't need to compete with my head of department actually they have their own job scope. What is that to compete? I don't need to compete because what I do is obvious'. The interviews also highlighted four new items on contextual issues:

Table 4. 5: New items generated from interviews (corporate culture)

Items generated from the interview (qualitative	Sample quote
data)	
We are happy to work together as a team and always complement each other.	• A person feels very warm, very loyal and very nice as part of a team. #Practitioner 6
	• We always complement to one another. #Practitioner 10
My organisation actively instils an entrepreneur spirit. The strategic thinking skills are driving towards that to be more business minded.	 You need to instil the entrepreneur spirit, so the people know we are here not to have fun, we are here to run the business. Running the business means you are responsible to stakeholders then you make sure that you run the business entrepreneur spirit.
My organisation controls the communication within the company. Every statement should obtain consent and approval before it goes out from the organisation.	 Never dare to do anything without approval from the immediate boss. It best to be cleared first before a message goes out from the organisation. #Practitioner 5 The message needs to be approved by three layers before it can go out. #Practitioner 12

- My organisation is very performance driven. Every personal performance in my organisation is based on a Key Performance Indicator (KPI).
- We are driven by some KPIs which are based on output and outcomes. #Practitioner 8
- Every personal performance is based on KPIs. So KPIs become the key ruling internal aspect of the culture. #*Practitioner 2*
- We are very performance driven company which is very competitive and we emphasise KPIs and performance. #Practitioner 11

Source: Developed for the study

The ICT innovation shows a very important for the organisations to communicate corporate information to the various stakeholders. For instance, Papastathopoulou et al., (2007) believe ICT innovation provides improvement in communication activities, especially with their customers. Parallel with that statement, one interviewee [consultant #5] discussed the important role of ICT in the organisation: 'I believe that as times goes by ICT will play an increasingly important role in helping to disseminate information under the corporate communication..[...].' In addition, one interviewee [practitioner #2] pointed out that ICT can spread information to bigger audiences: 'So, information through ICT can be accessed by the largest group of people, all the world. It's able to be a strong platform of communication across all'.

Three factors relate to management in ICT diffusion innovation. These comprise professional development and technical support; supervisor and organisational support; and supporting tangible and intangible reward. For the first factor, most of the interviewees shared the same view and perspective. For instance, one of the interviewees [consultant #5] who has more than 10 years experience with the largest technology company in Malaysia pointed out: 'You need to develop the technical support...[...] without them you cannot have a system that operates like this'. To extend this view, one interviewee [practitioner #3] added: 'we do have a technical support. [...].. actually jointly between our ICT division whereby they have a professional programmer, qualified people... [...] and we have got from corporate communications that are responsible for the content... [...]. Effective use of ICT application mainly depends on technical support which helps to enhance employee skills.

Moreover, organisational top management should be aware of state of the art technologies coming to the mainstream and be able to encourage their staff to adopt and learn those technologies. On the role of supervisor and organisation support on ICT, one interviewee

[practitioner #4] highlighted: 'as a head, I have a responsibility to tell them the appropriate course for them to consider attending'. However, to encourage the staff, the manager must appreciate the ICT. For instance, one interviewee [consultant #6] pointed out the issues of leadership by example: 'If you use a lot of ICT to communicate to employees through email, Facebook and blog. The lower staffs need to learn. [...] everybody must be exposed to ICT because the way of the world now if you want to be a best in class definitely ICT is a critical tool.' Her view is supported by one interviewee [consultant #5] who explained, 'without their support it is difficult for this initiative to go on...[...] being technology savvy, I believe, is one of the key qualities top management should have for the present organisation...[...]'

Many respondents do not agree with the idea of giving tangible or intangible incentives to staff with ICT competencies. One interviewee [practitioner #4] argued: 'I think if you come in you should equip with that skill'. Another interviewee [practitioner #10] added: 'no reward for ICT competence. We don't have it in our system'. ICT competencies are not extraordinary skills for gaining a reward. All respondents look at this competency as a requirement before they can be accepted as an employee. However, one respondent [practitioner #3] from a national utility company stated that reward can be given under learning and growth criteria but not technology itself: '[...]. if they very well versed in certain areas... [...]... of course under that area we do reward them. We gave them extra marks.'

Overall, the majority of the respondents agreed with the importance of professional development and technical support to enhance ICT application in organisations. The same feeling was also felt on the role of the supervisor and organisational support. However, they did not believe intangible and tangible rewards help. For ICT diffusion innovation, five new items were generated from the interview results. Details appear in the table below:

Table 4. 6 : New items generated from interviews (ICT diffusion innovation)

Items generated from the interview (qualitative	Sample quote
data)	
My organisation is aware of the latest technology coming to the mainstream and giving me an opportunity to adopt them.	 ICT is actually now a necessity and very much encouraged and some people have no choice. #Practitioner 3 The management realised a lot of value can be gained by utilising technology. #Practitioner 1
•	•
My immediate supervisor is an avid user of	• If you use a lot of ICT to communicate to employees

ICT to communicate to employees through email and blog	through email, Facebook and blog, then the lower staff needs to learn and it should be mandatory. #Practitioner 6
The management is very supportive and understands that ICT can help business become more efficient and make our work better.	 I encouraged the staff to take on that kind of ICT course. #Practitioner 4 The role of management is to understand how technology can help make the business more efficient. #Practitioner 1
My immediate supervisor encourages me to use social media (Facebook, blog and twitter) as a communication tools in my organisation.	 I would say that the management are very receptive to ICT. #Practitioner 4 Company provide training for people who do not have an IT skill. #Practitioner I We involve the social media like Facebook, twitter and so on. We utilise ICT in our daily life. #Practitioner 11
A competence in ICT is one of the elements in the Key Performance Indicators (KPIs) in my organisation.	 If the job scope required competence in technology is one of the requirements then due weight will be given when we do annual appraisal. #Practitioner 5 For the annual appraisal ICT competence is one of the elements. #Practitioner 11 Reward is one of our criteria in fact in our performance appraisal we have it under learning and growth. #Practitioner 3

Source: Developed for the study

The majority of respondents agreed that all four components of transformational leadership (for example, charismatic, inspirational, individualised consideration and intellectual stimulation) have an impact on CCM. One interviewee [practitioner #7] commented on this linkage: 'I think corporate communication means a lot of charisma... [...]. in communication the charisma element is pivotal, critical to get the message across to win the people over... [...]. In corporate communication we are expecting in the relationship you must be charismatic'. The respondent [practitioner #9] continued by detailing the characteristics of charisma: '[...] top management, marketing and sales need charisma. You need a certain amount of showmanship. It means a stage presence when you are on stage... [...] stand there with authority, a polite manner depending on who your target audience is'.

In addition, the notion that an inspirational leader inspires followers to enthusiastically accept and pursue challenging goals, mission, and vision of the future have been discussed by several interviewees. One respondent [practitioner #2] believed the inspirational leader must be consistent with their behaviour: 'The top management is the flag bearer. So, as a strong leader they need to inspire their troops to rally them. You cannot have any of these things unless you are consistent, but if you are consistent you can inspire'. One interviewee [consultant #8] argued that inspirational leaders should also have charisma: 'They might be

inspirational but not doers or hard doers... [...]. the other type really need probably a combination of charisma and inspirational. They are doers as well visionaries'.

The third component of leadership that affects CCM relates to individualised considerations. This type of leader communicates personal respect to followers by giving them specialised attention by recognising each one's unique needs. One respondent [consultant #5] elaborated on this by saying: 'The best leaders of course are those who are willing to go down, even meeting the lowest categories of people to say that I'm here, I'm your boss and you are important with me'. Such behaviour evidently shows that the management are aware of sentiment and what is going on within the organisation. In a similar way another interviewee [practitioner #4] shared his experience: 'My CEO appreciates the staff and then he can actually go down and have a drink with the staff... [...] he has a kind of interpersonal communication skill. He can talk and listen to the people'.

Finally, intellectually stimulated leadership proposes that the leader articulates new ideas that prompt followers to rethink conventional practice and thinking. However, one of the interviewees [consultant #8] argued that this type of leadership is not appropriate in corporate communication: 'I think this not in business... [...] leave them for the think tank for the country but for business it is really hard because we are driven by some KPIs. So, we certainly get directional leadership and someone who says what they want to do and the way they promote the vision.' The nature of corporate communication in certain organisation that works on routine descriptions might be against this type of leadership.

In summary, the majority of respondents agree that charismatic, inspirational and individualised considerate leaders all have a great impact on corporate communication. However, some of the respondents were not keen on intellectual stimulation styles of leadership.

Table 4. 7: New items generated from interviews (corporate leadership)

Items generated from the interview (qualitative data)	Sample quote
He/she teaches me about new knowledge and how to be an intellectual person.	• Teaching your people about knowledge and to be an intellectual person. #Practitioner 5
He/she explains the reason and rationale behind actions taken by him/her.	• Explaining the reason and rationale behind actions taken by your people to ensure they understand you.

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	#Practitioner 5
He/she communicates well and sends a very clear vision and systematic message to me.	 Corporate leadership is being able to articulate what is in your mind and the vision that you have. Being able to communicate at whatever strata. #Practitioner 8 Send a message very clear, very systematic, and right at the right time and the right position and you will create the effect of it very tremendous. #Practitioner 5
He/she is very transparent and consistent with his/her decisions.	 We are very cautious about what we say. We have to be very clear what can we divulge and what we cannot divulge. #Practitioner 5 We see transparency must be there. #Practitioner 12 In terms of top management, the key thing for any success is consistency. #Practitioner 2 Generally here the board very supportive. There is lots of support for transparency. #Practitioner 1
He/she is always able to deliver his/her promise.	• Leader must be consistent and able to deliver. #Practitioner 2
He/she gives me freedom to accomplish my work successfully.	• We allow freedom to explore new things but within a certain parameter. We have freedom to work. #Practitioner 10
He/she is willing to meet the staff if they need clarification on certain issues.	 I do not mind even to coming down to meet a member of public if they need clarification and we have to be prepared when we meet them and what the thing is we need to say. #Practitioner 5 He can talk to people and listen to the people. #Practitioner 4

Source: Developed for the study

The majority of interviewees supported the literature on the hypothesis that CCM is positively correlated to organisational performance. The organisational performance can divide into two sets: (1) A dependent variable measuring financial performance, and (2) Nonfinancial explanatory factors.

Mission achievement is one of the nonfinancial explanatory variables for organisational performance (Blackmon, 2008; Niven, 2003). The objective of the mission statement is to communicate organisational direction to stakeholders (Bartkus et al., 2004). For instance, one of the interviewees [consultant #5] expressed his views on communicating the organisation's mission: 'message constantly being disseminated, explain, educate and so that people can understand it. [...] the rule in case is communication, never tired to communicate'. Another interviewee [practitioner #4] had similar views on cascading the mission: 'the mission statement leads us in the direction that we want to go. Thus, in terms of mission achievement, I think that we got very detailed explanation of what the statement is all about. Then you set the department objectives... [...]'.

Mission achievement depends on communication activities to the stakeholder. One of the interviewees [consultant #8] expressed her views: 'the mission of course is dependent on activities that you do. It's easy for internal audiences. You have brainstorming and team building activities which play a part in making sure it is cohesive among the internal stakeholders. However, with external stakeholder you will face difficulties.'

In addition, one interviewee [practitioner #11] suggested using the media to cascade the organisational mission to the external stakeholders: 'We have communicated more; I mean we have to sustain our activities in that manner. We have lined up a programme that reaches the public as much as we can and the tools that we use of course the media. We have a good relationship with the media in order for us to share our mission and vision and our effort with the public'. Finally, another respondent [practitioner #2] discussed how to achieve the mission for the organisation: 'Our mission is to sell electricity and we want to be the best electricity provider. This is basically what we want to do and here the corporate communication role actually is to support the company through implementing strategic communication. The mission may be achieved when the company gets to satisfy, to meet stakeholder needs and requirements especially customers in this case'.

Based on the interviews four new items are highlighted that are important to be added in this study due to the contextual issues:

Table 4. 8: New items generated from interviews (mission achievement)

Items generated from the interview (qualitative data)	Sample quote
Our leaders keep reminding us and continue to talk about our mission.	• The leader and also management, senior management leaders at every level reminding the internal stakeholder, the staff about our mission and we have a role to play to help to achieve that mission. #Practitioner 5
The message is constantly being disseminated to make people understand the organisation's mission.	 The mission statement wellbeing disseminated and explain to the staff to enable understand what role they can play in helping the organisation to achieve its mission. #Practitioner 5 They have to understand what the company stands for, they have to understand the philosophy of the company, and they have to understand the mission, the vision and the core values. #Practitioner 12 We can help in terms of making sure that our stakeholders understand where we were going. #Practitioner 1

• We have a collective effort to achieve a mission of the organisations.	• We work together as a team to make sure we can achieve the organisational goals. #Practitioner 10
Our organisation uses the right media to communicate the organisation's mission.	• The tools that we use of course the media. We have good relationships with the media in order to share our mission and vision and our effort with the public. #Practitioner 11
Our mission is very clearly stated and everybody knows how to achieve it.	• The mission of organisations is everywhere and it's stated we stand for. #Practitioner 10

Source: Developed for the study

Based on the interview, the majority of respondents largely agreed with the list of existing items showed during the interviews. None of the extracted domains from an earlier step was suggested for deletion. Rather, few additional items were suggested to be inserted into relevant scales. For example, the constructs of CCM has generated eight new items, corporate culture (4 items), ICT diffusion innovation (5 items), corporate leadership (7 items) and mission achievement with 5 items.

Since corporate communication practitioners and consultants agree about the content of almost all existing items, the questionnaire was prepared for content and face validity by combining the generated items with existing scale items. Therefore, the entire items for this study are appended below.

Table 4. 9 : Overall items generated from literature review and interview

Construct (Dimension)	Items wording	Items codes
Corporate	We promote our corporate identity through corporate advertising.	CCM01
communication management (CCM)	We communicate the brand identity to be congruent with the brand image through corporate advertising.	CCM02
	We manage the advertisements, marketing and promotion (AMP) programme for the company's brand positioning.	CCM03
	We are responsible to design all corporate visual identity (e.g. logo, slogan or typography) for our company.	CCM04
	We developed our own content for corporate advertising and other advertisement materials.	CCM05
	• We have regular dialogues with the government agencies (e.g. Matrade, Mida and Security Commission) that relate to our business.	CCM06
	We manage the issues related to our products / services and create a mutual understanding between organisation and stakeholders.	CCM07
	We try to build a good image of the company through community relations (for example, open day, hari raya event and recycle campaign) activities.	CCM08
	We align organisational activities with external expectation and meet the industry regularity requirement.	CCM09
	We help organisations to understand the issues management and strategically adapt to organisational public policy environment.	CCM10

	• We are responsible to produce publications for the company (e.g.	CCM11
	newsletter, company profile and corporate brochures).We manage regular communication or function as liaison with various	CCM12
	stakeholders.	GG) (12
	 We organise the Corporate Social Responsibilities (e.g. sponsorship, charities and education) programme for stakeholders' engagement and participation. 	CCM13
	We control the content of electronic publication (e.g. e-newsletter, electronic press releases and corporate website) for our company.	CCM14
	 We participate in conferences and seminars locally and internationally to promote and create awareness about our company. 	CCM15
	 We organise external events (e.g. awareness campaign, trade exhibition and product launch) to keep board members and employees engaged with external stakeholders. 	CCM16
	• We develop and implement communication policies in our company.	CCM17
	 Our works includes speech writing, translations and a documentation process for various important documents. 	CCM18
	• We organise media programmes (e.g. media night or golf with media) to build a relationship with the media.	CCM19
	We do special media interviews to create awareness and literacy programmes about our business activities.	CCM20
	 We are responsible to address media needs and concerns professionally at any time. 	CCM21
	We archive and manage all photographs and video related to our company for future use.	CCM22
	 We are responsible for press release and media conferences if necessary. 	CCM23
	We work with the company secretary to organise the annual general meeting where the company will announce the annual financial result to the shareholders.	CCM24
	 We manage statutory communication (e.g. merger and acquisition or new CEO appointment) to Bursa Malaysia before releasing information to the public. 	CCM25
	• We work closely with the finance department to prepare the annual report and quarterly financial report.	CCM26
	We provide information and manage relationship with investors through various programmes (e.g. investor relations programme and annual general meeting).	CCM27
	• We create a positive context and better perspective on financial data to show the positive performance of the company.	CCM28
	 We provide training (e.g. communicate to the public and understand the public needs) at lower levels up to highest level to build internal branding for the company. 	CCM29
	We help the company create open communications within the organisation during a particular crisis (for example, sales drop, economic down turn or merger and acquisition).	CCM30
	We assist HR to explain key initiative the company is taking and manage change on regular basis through dialogue in the organisation.	CCM31
	We manage internal communication (e.g. newsletter, town hall or face to face) which is a process of cascading the company's internal guidelines, internal principle and vision to the employees.	CCM32
	• We organise internal events (e.g. family day, workshop or boot camp) to stimulate a team spirit and motivate them toward the company's vision.	CCM33
Corporate Culture	My organisation is a very personal place. It is like an extended family. People seem to share a lot of them.	CC01
	• The head of my organisation is generally considered to be a mentor,	CC02

	sage, or a father or mother figure.	
	 The glue that holds my organisation together is loyalty and tradition. Commitment to this firm runs high. 	CC03
	My organisation emphasises human resources. High cohesion and morale in the firm are important.	CC04
	We are happy to work together as a team and always complement each other.	CC05
	 My organisation is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks. 	CC06
	The head of my organisation is generally considered to be an entrepreneur, and innovator, or a risk taker.	CC07
	• The glue that holds my organisation together is a commitment to innovation and development. This is an emphasis on being first.	CC08
	 My organisation emphasises growth and acquiring new resources. Readiness to meet new challenges is important. 	CC09
	My organisation actively instils entrepreneur spirit. Strategic thinking skills are driving towards that to be more business minded.	CC10
	 My organisation is a very formalised and structural place. Established procedures generally govern what people do. 	CC11
	The head of my organisation is generally considered to be a coordinator, organiser, or administrator	CC12
	• The glue that holds my organisation together is formal rules and policies. Maintaining a smooth running institution is important here.	CC13
	 My organisation emphasises permanence and stability. Efficient, smooth operations are important. 	CC14
	 My organisation controls the communication within the company. Every statement should obtain consent and approval before it goes out from the organisation. 	CC15
	 My organisation is very production oriented. A major concern is with getting the job done, without much personal involvement. 	CC16
	• The head of my organisation is generally considered to be a producer, a technician, or a hard-driver.	CC17
	• The glue that holds my organisation together is the emphasis on tasks and goal accomplishment. A production orientation is commonly shared.	CC18
	 My organisation emphasises competitive actions and achievement. Measurable goals are important. 	CC19
	 My organisation is very performance driven. Every personal performance in my organisation is based on a Key Performance Indicator (KPI). 	CC20
	 My organisation believes that teamwork, participation and consensual decision-making will lead to the success of the organisation. 	CC21
	 My organisation has the stories of heroic deeds as part of the organisation's culture. These heroic deeds are also considered part of doing the job. 	CC22
	 My organisation's members highly value standardised goods and customer service. 	CC23
	 My organisation does not emphasise social relationship among workers. 	CC24
ICT Diffusion Innovation	I am confident that ICT tools that we are expected to use here have the necessary levels of functionality to motivate me to use them.	ICT01
	• I am given enough quality of training for learning about and applying the ICT tools that I am expected to use here.	ICT02
	• I am given enough time for training for learning about and applying the ICT tools that I am expected to use here.	ICT03
	• I am given enough flexibility in my job demands (in terms of rescheduling daily demands and activities and so on) to learn how to	ICT04

	apply ICT tools that I am expected to use here.	
	Our work procedures support our capacity to use ICT tools that I am	ICT05
	expected to use here.	
	• I have been given sufficient time to think about how I can best use ICT tools that I am expected to use here.	ICT06
	Organisational technical support is sufficient (e.g., help desk, and getting software operational) to allow me to learn about and apply ICT tools that I am expected to use here.	ICT07
	Mentoring support is sufficient to allow me to learn about and understand how to effectively apply the ICT tools that I am expected to use here.	ICT08
	 I was given the opportunity to trial and experiment ICT tools that I am expected to use here. 	ICT09
	 The result/benefit of using ICT tools that I am expected to use here were easy to observe. 	ICT10
	 My organisation is aware of the latest technology coming to the mainstream and giving me an opportunity to adopt them. 	ICT11
	 My immediate supervisor encourages me to learn about and/or apply ICT tools that I am expected to use here. 	ICT12
	I enjoy learning from others about applying ICT tools that we are expected to use here.	ICT13
	• I can trust my immediate supervisor that if I make some mistakes when first getting to grips with ICT tools that I am expected to use here I will not be blamed and pressured when learning and practicing these tools.	ICT14
	 My immediate supervisor in my organisation is open to suggestions on improving the way that ICT tools that I am expected to use here are used 	ICT15
	Our organisation supports our ability to share experience of ICT tools that I am expected to use here.	ICT16
	My immediate supervisor is an avid user of ICT to communicate to employees through email and blog.	ICT17
	The management is very supportive and understands that ICT can help business become more efficient and make our work better.	ICT18
	• My immediate supervisor encourages me to use social media (Facebook, blog and twitter) as a communication tools in my organisation.	ICT19
	Our organisation provides tangible rewards (bonus, promotion, and so on) to those who share ideas and experience about ICT tools that I am expected to use here.	ICT20
	Our organisation provides intangible rewards (recognition, thanks or public praise) to those who share ideas and experience about ICT tools that I am expected to use here.	ICT21
	• I receive tangible rewards (advancement, additional pay, security, or better job prospects) from using ICT tools that we are expected to use here.	ICT22
	• I receive intangible rewards (respect, admiration, self-fulfilment, feel good about myself) from using ICT tools that we are expected to use here.	ICT23
	Competence in ICT is one element of the Key Performance Indicators (KPIs) in my organisation.	ICT24
Corporate	He/she makes me feel good to be around him/her.	CL01
Leadership	I have complete faith in him/her.	CL02
	I am proud to be associated with him/her.	CL03
	He/she expresses with a few simple words what I could and should do.	CL04
	He/she provides appealing images about what I can do.	CL05
	He/she helps me find meaning in my work.	CL06
	He/she enables me to think about old problems in new ways.	CL07

He/she Gur mis Our org Our org Our org We con mission We con values s Our lear Our lear The me the organisms	provides me with new ways of looking at puzzling things.	CL08
He/she Gur mis Our mis Our mis Our mis Our stra My day My co- Our org Our org Our org Our org We con mission We con values s Our lear The me the organisation.	gets me to rethink ideas that I had never questioned before.	CL09
He/she Gur mis Our mis Our mis Our mis Our stra My day My co- Our org Our org Our org We con mission We convision s We convalues s Our lead The me the orga	nelps me to develop myself.	CL10
He/she Strategy Our mis Our mis Our mis Our mis Our org Our org Our org We con mission We convalues s Our lead The me the orga	ets me know how he/she thinks I am doing.	CL11
He/she person. He/she He/she messagg He/she He/she He/she He/she He/she He/she issues. Mission Achievement Our mis Our mis prioritie Strategg Our straem My day My co- Our mis Our org Our org We con mission We con values seed our leader of the me the organism.	gives personal attention to others who seem rejected.	CL12
message He/she Grave He/she He	each me about new knowledge and how to be an intellectual	CL13
He/she Strategy Our mis My day My co- Our org Our org Our org We con mission We convision s We convalues s Our lead		
He/she message He/she He/she He/she He/she He/she He/she issues. Mission Achievement Our mis Our mis Our mis Our mis Our stra My day My co- Our org Our org Our org We con mission We con values s Our lead The me the orga	explains the reason and rationale behind action taken by him/her.	CL14
He/she He/she He/she He/she He/she issues. Mission Achievement Our mis Our mis I unders Our mis prioritie Strategy Our stra My day My co- Our org Our org Our org We con mission We con values s Our lead The me the organisms	communicate well and send a very clear vision and systematic	CL15
He/she He/she He/she issues. Mission Achievement Our mis Our mis Our mis Our mis Our mis Our stra My day My co- Our org Our org Our org We con wision s We con values s Our lead The me the organisms		CL16
He/she He/she issues. Mission Achievement Our mis Our mis Our mis Our mis Frategy Our stra My day My co- Our org Our org Our org We con mission We con vision s We con values s Our lead The me the orga	s very transparent and consistent with his/her decision.	CL10 CL17
He/she issues. Mission Achievement Our mis Uunders Our mis Our mis Prioritie Strategy Our stra My day My co- Our org Our org Our org We con mission We con values s Our lead The me the orga	s always able to deliver his/her promise.	CL17 CL18
issues. Mission Achievement Our mis I unders Our mis prioritie Strategy Our stra My day My co- Our org Our org Our org Our org We con mission We con values s Our lead	give me freedom to accomplish my work successfully.	CL18 CL19
Achievement Our mis I unders Our mis prioritie Strategy Our stra My day My co- Our mis Our org Our org Our org We con mission We con vision s We con values s Our lead	willing to meet the staff if they need clarification on certain	CL19
Achievement Our mis I unders Our mis prioritie Strategy Our stra My day My co- Our org Our org Our org Our org Ve con mission We con vision s We con values s Our lead	sion is used to monitor performance	MA01
Our mis prioritie Strategy Our stra My day My co- Our mis Our org Our org Our org We con mission We con vision s We con values s Our lead The me the organism of the control organism or the control organism of the control of the co	sion is used to make decisions	MA02
prioritie Strategy Our stra My day My co- Our mis Our org Our org Our org We con mission We con vision s We con values s Our lead	tand how my job helps to achieve our mission	MA03
Strategy Our stra My day My co- Our mis Our org Our org Our org We con mission We con vision s We con values s Our lead	sion statement helps me to understand how my organisation sets	MA04
 Our stra My day My co- Our org Our org Our org Our org We con mission We con vision s We con values s Our lea The me the organ 	is important to our mission	MA05
 My day My co- Our mis Our org Our org Our org We con mission We con vision s We con values s Our lear The me the organ 	tegy is achievable	MA06
 My co- Our mis Our org Our org Our org We con mission We con vision s We con values s Our lead The me the organization 	to day duties help us to achieve our mission	MA07
 Our mis Our org Our org Our org We con mission We con vision s We con values s Our lead The me the organization 	vorkers day to day duties helps us to achieve our mission	MA08
 Our org Our org Our org We con mission We con vision s We con values s Our lea The me the organization 	sion is the driving force for this organisation	MA09
 Our org Our org We con mission We con vision s We con values s Our lead The me the organization 	anisation's actions are consistent with our mission	MA10
 Our org We con mission We con vision s We con values s Our lead The me the organization 	anisation's action are consistent with our vision	MA11
 We con mission We con vision s We con values s Our lead The me the organization 	anisation's actions are consistent with our core values	MA12
 We convision s We convalues s Our lea The methor organization 	sistently meet the foundation for performance established in our statement	MA13
 We convalues s Our lea The methor organization 	sistently meet the criteria for performance established in our	MA14
Our leaThe me the orga	sistently meet the criteria for performance established in our	MA15
• The me the orga	lers keep reminding us and continue to talk about our mission.	MA16
_	sage constantly being disseminated to make people understand nisation's mission.	MA17
- WC Hav	e a collective effort to achieve a mission of the organisations.	MA18
Our org mission	anisation uses the right media to communicate the organisation's	MA19
	sion is very clearly stated and everybody knows how to achieve	MA20

Source: Developed for the study

4.3.5.3 Stage 3: Content Validity

A valid and reliable measure for the questionnaire is developed through conducting a content validity study. The goals of this stage are two fold: to assess the content validity of various scales being developed and to attempt to identify any items which remain unclear. The

content was examined, together with the clarity of scale based on the procedure suggested by Rubio *et al.* (2003). The response forms (see Appendix 4.6) were sent to 15 practitioners and experts in corporate communication, public relations and marketing. The ideal number of experts suggested by scholars is a range of two to 20 (Gable and Wolf, 1993). They were professionals who work and publish in their field (Rubio *et al.*, 2003). Ten out of 15 experts returned the survey, and only one expert provided comment on how to improve the measurement. Two criteria are used to evaluate the scale: 1) representativeness of the content domain; and 2) clarity of the item. A scale from 1 to 4 has been used to rate each item. Representativeness is verified by an item's ability to represent the content domain, as described in the theoretical definition. Meanwhile, item clarity is evaluated based on how clearly an item is worded.

The Content Validity Index (CVI) is calculated based on the representativeness of measure. All the scales in this research show CVI scores of 0.70 to 1.00. According to Davis (1992) for new measures, a CVI score of at least 0.80 is needed. Therefore, all items having CVI scores of less than 0.80 were culled from the list. See Appendix 4.1, 4.2, 4.3, 4.4 and 4.5 for the items calculated based on CVI. Based on the experts' comments on clarity a few items were changed in the sentence structure to improve the clarity and the quality of the questions.

Table 4. 10: The number of item dropped

			1.1		
Constructs	Drop items	Change the	Original item	Number of	New number
		sentence	from literature	items	of items for
		structure	& interview	dropped	pilot test
Corporate	• CCM01, CCM02,	• CCM05,	33	10	23
communication	CCM06, CCM09,	CCM23,			
management (CCM)	CCM12, CCM15,	CCM24			
	CCM17, CCM20,				
	CCM25, CCM33				
Corporate Culture	• CC15, CC21,	• CC05	24	5	19
	CC22, CC23,				
	CC24				
ICT Diffusion	• ICT01, ICT06,	• ICT02,	24	8	16
Innovation	ICT09, ICT14,	ICT03			
	ICT17, ICT19,				
	ICT22, ICT24				
Corporate Leadership	• CL13	• Nil	19	1	18
Mission Achievement	• Nil	• Nil	20	0	20

Source: Developed for the study

4.3.5.4 Stage 4: Instrument Testing

The final stage of the development process involved a pilot test of the overall instrument. The online survey started on 25 September 2010 for one month. The online Survey was distributed to 150 registered members of the Corporate Communication Research (CCR) group in Facebook. This group was purposely created by the researcher on January 2010 to discuss corporate communication research in Malaysia. The majority of group members were practitioners and academicians in the field of corporate communication and public relations to ensure that all scaling and measurement units were usable (metric and calibration equivalence). Within a month, only 35 out of 150 from the group list had replied to the survey. According to Roscoe (1975) sample sizes of larger than 30 and less than 500 are appropriate for most research.

The English-language version of CCM (from multiple sources), Deshpande and Farley's corporate culture (1999), Peansupap and Walker's (2005) ICT innovation diffusion, Bass and Avolio's (1990) corporate leadership and Blackmon's (2008) mission achievement questionnaire were used to obtain data. This follows the preference for using English in developing questionnaires, instead of Malay language on Malaysian subjects (Bochner, 1994; Furnham and Muhiudeen, 1984; Schumaker and Barraclough, 1989). The main reason is that Malaysians, especially those involved in business, are assumed to be proficient in the English language (Lim, 2001). The data obtained from the pre-test was subjected to a further purification process. This involves reliability analysis.

Table 4. 11: Details of questionnaires and respondents (N=35)

Details about Questionnaires and Respondents				
No. of Distributed Questionnaires	Online Survey to 150 respondents registered as a member of Corporate Communication Research (CCR) group in Facebook.			
No. of Returned Questionnaires	60			
Usable Questionnaires	35			
Corporate Communications & PR Practitioners	35			
Male	19			

Female 16

Source: Developed for the study

Table 4. 12 : Demographic profile of Malaysian corporate communications and public relations practitioners' pre-test sample (N=35)

Sample size (n)	%	N
Age		
Less than 30	40.0	14
31-40	37.1	13
41-50	20.0	7
More than 51	2.9	1
Total	100	35
Gender		
Male	51.4	18
Female	48.6	17
Total	100	35
Job position		
CEO/Director	5.7	2
General Manager	0	0
Manager	34.3	12
Executive	25.7	9
Other	34.3	12
Total	100	35
Level of education		
SPM/STPM	0	0
Diploma	11.4	4
Degree	65.7	23
Masters	22.9	8
PhD	0	0
Other	0	0
Total	100	35
Number of years worked with the company		
Less than 5	65.7	23
5-10	20.0	7
11-15	5.7	2
More than 15	8.6	3
Total	100	35
Number of years in present position		
Less than 2	48.6	17
2-4	25.7	9
4-6	11.4	4
More than 6	14.3	5
Total	100	35

Source: Developed for the study

The test was conducted to seek the mechanics of compiling the questionnaire were adequate and test the reliability of the scale. Cronbach's alpha was used as a tool to test the reliability of a multi-scale measurement to assess whether all items were measuring the same thing

(DeVellis, 1991). It was also used to remove items with low item-total correlations (<0.3) (Nunnally, 1978). Because 96 items were too many for this type of instrument, as the expert pointed out, as many as possible were eliminated while retaining the desired reliability levels. Cronbach's Alpha (Cronbach 1970), was highlighted in the analysis as fairly standard in most discussions of reliability. The level of acceptance for the reliability depends on the purpose of the research project. For example, Nunnally argues that in the early stages of research, reliabilities of 0.50 to 0.60 would suffice, and that "for basic research, it can be argued that increasing reliability beyond 0.80 is often wasteful" (1967, p.226). Thus, for this study, the target level of minimum reliability was set in the 0.70 to 0.80 range.

Table 4. 13: The results of the reliability test

Constructs	Items	Corrected item- total correlation	Cronbach's alpha if the item	Cronbach's alpha	Sample size (N)*
Corporate	CCM03	0.561	deleted 0.914	0.917	35
Communication	CCM04	0.540	0.914	0.917	33
Management	CCM05	0.628	0.914		
Management	CCM07	0.265	0.917		
	CCM08	0.285	0.917		
	CCM10	0.236	0.918		
	CCM11	0.532	0.914		
	CCM13	0.504	0.914		
	CCM14	0.742	0.910		
	CCM16	0.540	0.913		
	CCM18	0.546	0.913		
	CCM19	0.563	0.913		
	CCM21	0.563	0.913		
	CCM22	0.190	0.918		
	CCM23	0.799	0.907		
	CCM24	0.711	0.910		
	CCM26	0.620	0.912		
	CCM27	0.798	0.907		
	CCM28	0.767	0.908		
	CCM29	0.569	0.913		
	CCM30	0.581	0.913		
	CCM31	0.624	0.912		
	CCM32	0.127	0.920		
Corporate Culture	CC01	0.547	0.879	0.886	35
•	CC02	0.638	0.876		
	CC03	0.726	0.873		
	CC04	0.631	0.877		
	CC05	0.296	0.888		
	CC06	0.543	0.880		
	CC07	0.534	0.880		
	CC08	0.461	0.881		
	CC09	0.634	0.878		
	CC10	0.281	0.888		
	CC11	0.582	0.877		

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	CC12	0.634	0.875		
	CC13	0.544	0.879		
	CC14	0.604	0.878		
	CC16	0.410	0.883		
	CC17	0.603	0.883		
	CC18	0.446	0.882		
	CC19	0.510	0.880		
	CC20	0.264	0.888		
ICT Diffusion	ICT02	0.731	0.927	0.933	35
Innovation	ICT03	0.838	0.924		
	ICT04	0.726	0.927		
	ICT05	0.796	0.926		
	ICT07	0.736	0.928		
	ICT08	0.807	0.925		
	ICT10	0.592	0.931		
	ICT11	0.013	0.948		
	ICT12	0.549	0.932		
	ICT13	0.663	0.930		
	ICT15	0.577	0.931		
	ICT16	0.790	0.926		
	ICT18	0.756	0.927		
	ICT20	0.589	0.931		
	ICT21	0.764	0.926		
	ICT23	0.846	0.924		
Corporate Leadership	CL01	0.761	0.932	0.938	35
•	CL02	0.830	0.931		
	CL03	0.797	0.932		
	CL04	0.737	0.933		
	CL05	0.885	0.929		
	CL06	0.888	0.929		
	CL07	0.713	0.933		
	CL07 CL08				
		0.647	0.935		
	CL09	0.723	0.933		
	CL10	0.604	0.935		
	CL11	0.726	0.933		
	CL12	0.774	0.932		
	CL14	-0.085	0.947		
	CL15	-0.223	0.948		
	CL16	0.727	0.933		
	CL17	0.806	0.931		
	CL18	0.600	0.935		
	CL19	0.694	0.933		
Mission Achievement	MA01	0.689	0.937	0.941	35
	- '		0.935		
	MA02	0.780			
	MA02 MA03	0.780 0.782			
	MA03	0.782	0.935		
	MA03 MA04	0.782 0.857	0.935 0.934		
	MA03 MA04 MA05	0.782 0.857 0.667	0.935 0.934 0.937		
	MA03 MA04 MA05 MA06	0.782 0.857 0.667 0.551	0.935 0.934 0.937 0.939		
	MA03 MA04 MA05 MA06 MA07	0.782 0.857 0.667 0.551 0.750	0.935 0.934 0.937 0.939 0.936		
	MA03 MA04 MA05 MA06 MA07 MA08	0.782 0.857 0.667 0.551 0.750 0.663	0.935 0.934 0.937 0.939 0.936 0.937		
	MA03 MA04 MA05 MA06 MA07 MA08 MA09	0.782 0.857 0.667 0.551 0.750 0.663 0.761	0.935 0.934 0.937 0.939 0.936 0.937 0.936		
	MA03 MA04 MA05 MA06 MA07 MA08 MA09 MA10	0.782 0.857 0.667 0.551 0.750 0.663 0.761 0.730	0.935 0.934 0.937 0.939 0.936 0.937 0.936		
	MA03 MA04 MA05 MA06 MA07 MA08 MA09	0.782 0.857 0.667 0.551 0.750 0.663 0.761	0.935 0.934 0.937 0.939 0.936 0.937 0.936		

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MA13	0.737	0.936	
MA14	0.780	0.935	
MA15	0.740	0.936	
MA16	0.688	0.937	
MA17	0.114	0.948	
MA18	0.029	0.950	
MA19	0.742	0.936	
MA20	0.555	0.939	

Source: Developed for the current study

The items for deletion from Table 4.13 were determined based on the correlations of items within each scale (henceforth item-item), the corrected item-to-total correlations (henceforth item-scale), the item standard deviation scores and the effects on Alpha if the item were deleted. The Alpha would increase if items with low item and item-scale correlations are deleted; items showing low variance (and hence would have low explanatory power in any model) are also potential candidates to be eliminated. However, to ensure that the domain coverage (for example, content validity) of the construct would not suffer a check is made before any item is deleted. As a result, several items were dropped and the length of some scales was significantly reduced. The remaining items are listed in Appendix 4.7. Table 4.14 shows the original number of items in each scale, and the numbers after items were culled.

Table 4. 14: Results from the pre-test

		Pilo	t Test	
Scale Name	Items	Alpha	Number of items dropped	New number of items for main survey
Corporate Communication Management (CCM)	23	0.922	5	18
Corporate Culture	19	0.883	3	16
ICT Diffusion Innovation	16	0.952	1	15
Corporate Leadership	18	0.956	2	16
Mission Achievement	20	0.965	2	18

NOTE: Items - Number of items in each scale. Alpha - Crobach's reliability coefficient.

Source: Developed for the study

In summary, the creation process of instruments consisted of reviewing known existing instruments, selecting suitable items, creating new items as required, followed by undertaking an extensive scale development process. It is believed that the method of developing the scales provides a high degree of confidence in their constructs and content validity. The result was an 83 item instrument, comprising five scales, all with an acceptable level of reliability. This instrument was then used to investigate the determinants and the consequences of CCM.

4.4 Main Survey: Targeted Respondents and Collection Procedure

Two types of data (primary and secondary) were utilised in this study. Primary data was gathered through the survey of the target population's managers of the companies listed in the MSE from 2005 to 2010, either in the Main Market or the Ace Market. For secondary data current financial performance of companies (2011) is obtained through their respective published annual report available online (Reuters DataStream). In this section, the targeted respondents and the data collection procedure are discussed further.

4.4.1 Targeted Respondents

All 1,020 corporate communication and public relations managers of public listed companies were included in this research, for two reasons. First, the collection of data for all the populations was practical and financially feasible. Therefore, they were not subjected to any sampling. Second, the requirement about the sample size by chosen analysis techniques (EFA and CFA) and structural equation modelling (SEM) requires a considerable sample size in order to obtain reliable estimates (Joreskog and Sorbom, 1996).

The sample size for the empirical research depends on a number of factors, including homogeneity of sampling unit, confidence, precision, statistical power, analytical procedure, cost time and personnel (Davis, 2000). Many give a different perspective on how to determine the sample size. For example, the rules of thumb by Roscoe (1975) suggest samples larger than 30 and less than 500 are suitable for most research. However, multivariate analysis needs ten times or more samples as large as a number of variables.

SEM analysis requires an adequate minimum sample size to ensure a good fit for the model. The rule of thumb by Medsker *et al.* (1994) suggests a minimum sample size of 100 is appropriate for SEM. Furthermore, Hair *et al.* (1998) suggest the general rule for SEM requires five to ten observations for each parameter estimated. However, Kelloway (1998) and Marsh *et al.* (1988) suggest a 200 sample size may be required to generate valid fit measures. Additionally, Boomsma (1983) suggests that for a small to medium size model 200 is an adequate sample.

4.4.2 Data Collection Procedure

The procedure started by contacting a relevant professional association to ask for its support and more information about the industry. This association provided an online database containing a list of emails, websites and contact persons of members. Then, the initial contact was made with the public relations and corporate communication manager of each company in a personalised email requesting the company's participation in the study. An email was sent to all respondents with the link to the online survey website, explaining the nature of the survey. This technique may have reached a large number of people and elicited faster responses. According to Dillman (1991, 1999) personalised correspondence is an important element in increasing the response rate.

The online survey questionnaires used Survey Monkey, prominent software in the market. Survey Monkey, a professional account, was registered on 25 September 2010 for the pilot test with a cost of £19.95 per month. Then, the account was continued until 30th March 2011 for the main data surveys. For the main data survey collection, an advanced application was used to track the specific respondent. This action identified which respondent response matched with a company's financial data for SEM analysis. Survey Monkey allows a researcher to add a list of emails into the system and send a unique survey link through a message delivery by their mail server. The unique links are automatically generated by the system when the mail server delivers the message. The specific email address in the list is tied to each unique link via the tags included in the default message. The emails of a respondent are populated on the *response* in the Analyse section and tracked by status in the collector.

There are many advantages in using online survey, such as ease of access to individuals from distant locations (Bryman and Bell, 2007), ability to reach participants who are difficult to contact, and automated data collection is convenience to the researcher, which reduces effort and time (Wright, 2005). In addition, the errors of coding data from paper to electronic file can be reduced, because data can easily be transferred from the database into SPSS file for analysis. Furthermore, these statements are also supported by past online surveys, such as easier access to a wider range of customers (Illieva *et al.*, 2002), low cost, and ability to capture the analysed data quickly. These characteristics make an online survey suitable for cross-national research (Dillman, 2000).

Some proponents argue that a disadvantage of using online survey is the availability of internet access for the respondents, some of whom may be uncomfortable with putting data online. For example, Hair *et al.* (2007) comment that online surveys are limited to computer users, and computer anxiety might affect the response of the respondents (Deutskens *et al.*, 2006). However, in Malaysia, this issue is not a major problem, because internet penetration reached 64.6 percent in 2010 (ITU, 2010) and of the large companies 100 percent are connected to the internet. Derived from this argument, it strengthens the choice of online survey, as a preferred method.

The low response rate is a common argument presented against online surveys. Therefore, to obtain the requisite number of responses, the online questionnaire was sent to a large number of respondents (1,020 respondents) which was the total population of the study. In addition, several steps were taken to encourage participation. This included emailing the respondents to invite them to participate and engage in the research by corresponding on the questionnaires sent to them. Respondents are more agreeable to completing the survey because the email is sent personally (Dillman, 1999). Although there is no proof to indicate that a paper based survey would provide more responses, in some cases online surveys have a higher response rate over postal survey (Kiesler and Sproull, 1986; Parker, 1992).

The online survey was left open for four months. For the first two-month period 70 (6.90%) valid responses were received. Reminder emails were sent to the respondents to gather more

surveys because previous research shows follow-ups will increase the response rate significantly (Heberlein and Baumgartner, 1978). The reminders were sent to the remaining companies on 2 January 2011 and by March 2011 another 65 (6.37 %) valid responses were received; the overall response reached 135. The completed surveys collected thus far were deemed not sufficient for testing the model. To overcome these issues, a field survey was conducted in March 2011 in Malaysia. A paper-based survey was distributed in two major events organised by the Institute of Public Relations of Malaysia (IPRM) and drop and collect method to several companies located in Kuala Lumpur. As a result, 88 responses were collected which increased the overall responses to 223, equating to 21.86 percent from the total of sample / population. The number was sufficient for the further stages and testing of the model.

4.4.3 Secondary Data

Parts of this study used secondary data in order to measure the financial performance of the company. Even though it is not widely used in marketing research because of several issues (Houston and Johnson, 2000), its growth can be seen in much social science research. Since the 1960s the development of quantitative social research has played an important part in the growing use of secondary data research in social indicator analysis (Sobal, 1982). In other disciplines (for example, finance and economics) secondary data is widely accepted. Many (Houston, 2004; Sorensen *et al.*, 1996) believe that secondary data gives more advantages to the researcher.

Besides cost saving, the advantages of using a secondary data source is that "they already exist; the time spent on the study is, therefore, likely to be considerably less than the time spent on studies that use primary data collection" (Sorensen *et al.*, 1996, p.435). Specifically, Houston (2004) indicates three main advantages of secondary data. First, secondary data is 'real' data collected from a less obtrusive method. For instance, the data is free from influence by self-report bias that may have occurred in collection via attitudinal scales. Second, the secondary data is easy to use, and saves the researcher time and cost. Furthermore, the stage of instrument development and primary data collection can be

avoided. Third, it can be of benefit to the researcher to employ alternative data in a multi method triangulation approach.

However, secondary data are not widely used for marketing constructs, due to concerns over validity issues (Houston and Johnson, 2000) which reduce their attractiveness (Rindfleish and Heide, 1997). Moreover, the investigation procedures of construct validity for secondary data also are not well defined. More specifically, there are four main issues related to secondary data in marketing research: (1) availability of data; (2) the alignment of data with domain constructs; (3) not matching with other data; and (4) secondary data may suffer from other types of sample biases (Houston, 2004).

While some (Houston and Johnson, 2000; Houston, 2004) are concerned with weaknesses of secondary data, other researchers (Griffin and Mahon, 1997) believe it is important to measure the performance of organisations. For instance, according to Srivastava *et al.* (1999), less use of secondary data in marketing research will diminish its influence on top management and on scholars in other business disciplines, especially in finance and economics. The following section gives an overview on how the secondary data have been used in the past and how they were used in this study.

The issue of mismatching secondary data (financial performance data) measures in the study could lead to theoretical inconsistencies (Orlitzky *et al.*, 2003). To avoid this problem Wood and Jones (1995) suggest the choice of financial performance measure should be matched with the other measures. Basically, financial performance data can be measured using three alternative approaches: (1) market-based measure; (2) accounting-based measure; and (3) perceptual measure. The first two approaches can be obtained from the secondary source, while perception measures are obtained from a primary source.

According to Orlitzky *et al.* (2003), in the first approach, the market value of a company derived from the stock price of the company is used to measure financial performance. This reflects the notion that the main stakeholders of the company are shareholders who determine company share price appreciation (Cochran and Wood, 1984) based on their satisfaction. Therefore, their perception of "past, current and future stock return and risk will determine a

firm's stock price and market value" (Orlitzky *et al.*, 2003, p.408). In other words, the financial market-based data is determined by an investor (consumer level). Some researchers who have used this approach include Cochran and Wood (1984), Pava and Krausz (1995), Preston (1978), Shane and Spicer (1993), Simerly (1994) and Vance (1975).

Second, an accounting-based measure is derived from the effectiveness of the company to utilise their assets as well as their internal efficiency for certain measures. Measures such as ROA, ROE and net income are examples of this approach. In some ways, it captures a firm's internal efficiency (Cochran and Wood, 1984) and strategic choices made by a firm (Stickney, 1990). Additionally, accounting returns are dependent on discretionary allocations of a fund by managers to different projects and policy choices. Hence, it reflects internal decision-making capabilities and managerial performance rather than external market responses to organisational action (Orlitzky *et al.*, 2003, p.408). This approach has been used by Pava and Krausz (1995), Russo and Fouts (1997), Simerly (1994), Turban and Greening (1997) and Waddock and Graves (1997).

The last approach to measuring financial performance used a perceptual method. In this approach, some subjective judgments for financial performance were provided by respondents (Executives or managers) using some perspectives such as wise use of corporate assets and financial position relative to other companies. Those who have used this approach include Conine and Madden (1987), Reimann (1975) and Wartick (1988).

To avoid a mismatch of data in this study, accounting-based measures were used to indicate financial performance. There were two main reasons for this decision. Firstly, the accounting-based measures were determined by the managers at the organisational level, which is congruent with other quantitative data that was collected in this study. Secondly, an accounting-based indicator has been used in other studies close to CCM (for example, corporate social performance). For example, a meta-analysis of 52 studies on the relationships between corporate social performance and accounting-based measures shows as more highly correlated compared to financial performance based on market and perceptual measures (McGuire *et al.*, 1988; Orlitzky *et al.*, 2003). Market-based measures are determined by an investor (consumer level) which is inconsistent with the other construct

measures in this study (for example the measures of corporate culture and corporate leadership) that collected from managers at an organisational level.

The perceptual measures have received much criticism (Griffin and Mahon, 1997; Venkatraman and Ramanujam, 1987). Even though this approach can be collected concurrently with other quantitative data at the same level (managers), the self-rate for their own performance can be biased (Huber and Power, 1985; Philips, 1981). This is mostly based on their perception of what their firm has done, not what it has actually done (Griffin and Mahon, 1997) and also managers are likely to overrate their firm performance (Venkatraman and Ramanujam, 1987). Dess and Robinson (1984) claim, generally, accounting-based measures are preferred and well accepted. It may be substituted by perceptual evaluations whenever (1) "accurate objective measures (accounting-based measures) are unavailable, and (2) the alternative is to remove the consideration of performance from the research design" (p.271). In this study, both issues were unaffected by the accounting-based measures because of availability and theoretical match with the research model.

To overcome validity issues, Houston (2004) notes that there are four relevant aspects of construct validity (content, convergent, discriminant and nomological validity) to assess secondary data. Content validity means the degree to which the measure samples, adequately, the domain of the construct (Churchill, 1979). In this research, it was completed during the interviews with the corporate communication practitioners and detailed discussion is provided in Chapter 4. Unlike content validity, convergent and discriminant validities are presented in Chapter 6 with the primary data (survey data). After following the validation process, marketing constructs can be conceptualised as independent or dependent variables (Houston, 2004).

The availability of secondary data for this study is not problematic, because public listed companies are regulated to publish their financial data to be public (Rashid *et al.*, 2003). In this research, the source of secondary data was gathered as at 30 September 2012 from the financial reports of public listed companies obtained from DataStream (Thomson Reuters). Financial data (ROA, ROI and ROE) over one year (2011) were used in this research, which is in line with other research (Aupperle *et al.*, 1985; McGuire *et al.*, 1988; Mahoney and

Roberts, 2007; Rashid *et al.*, 2003). According to Ullman (1985), previous study on economic performance covers different time periods ranging from seven months to ten years. To ensure comparability across the firm, this study used the company's financial data for fiscal year ends on December 31 (Anderson and Frankle, 1980).

The aggregate data employed in the analysis where the ROA, ROI and ROE represent the value of financial performance. This approach is in line with Rashid *et al.* (2003).

4.4.4 Data Analysis Techniques

Before conducting the major part of the analysis, descriptive statistics took place by using SPSS 15.0 software. In this stage, the means and the standard deviation were calculated in order to disclose the central tendency and dispersions. For normal data distribution, Skewness and Kurtosis were tested. Hence, the reliability and item-total correlation was tested for the initial test to refine the measures (Churchill, 1979; Gerbing and Anderson, 1988). Validation refined measurement scales via exploratory factor analysis (EFA) were conducted to finalise the scales (Marsh *et al.*, 1988).

The analysis of data for this study consisted of two major parts: (1) assessment of the measurement model by using confirmatory factor analysis (CFA); and (2) assessment of a structural model using Structural Equation Modelling (SEM) as recommended by Henseler *et al.*, (2009). The first part involves developing an acceptable measurement model. A CFA and AMOS approach is employed to examine the properties' scales (for example, common method bias, unidimensionality, convergent validity, discriminant validity and nomological validity). Once the measurement model is validated, the second part is conducted to examine the structural model for all constructs by using AMOS 18.0.

4.4.5 Assessment of Measurement Model

This part provides confirmatory factor analyses (CFA) of the scales that were indicators of the theoretical constructs introduced and modelled in this confirmation document. The CFA was used to develop an acceptable measurement model. In this stage, the validity of the

construct by its indicators were examined for their internal consistency (Bagozzi *et al.*, 1991; Steenkamp and Van Trijp, 1991) based on (1) unidimensionality of the construct (Anderson and Gerbing, 1988), (2) reliability, (3) convergent validity, (4) discriminant validity, and (5) nomological validity (Anderson and Gerbing, 1988; Steenkamp and Van Trijp, 1991).

Firstly, uni-dimensionality of construct can be achieved (Anderson and Gerbing, 1988) when the multiple indicators of a construct demonstrate internal consistence and external distinction from other measures. Therefore, to ensure the construct is uni-dimensional, confirmatory factor analysis was used that it was composed of a set of logical (theoretical) indicators (Hair *et al.*, 2006; Hattie, 1985). Second, composite reliability was used in this study and Cronbach's alpha to assess the reliability of scale. The scores of composite reliability should be more than 0.70, to indicate the measures all consistently represent the same latent construct (Hair *et al.*, 2010; Nunnally and Bernstain, 1994). Third, the researcher employed Fornell and Larcker's (1981) average variance extract (AVE) in order to examine convergent validity. AVE with values equal or greater than 0.5 indicates sufficient convergent validity (Joreskog and Sorbom, 1996).

Fourth, discriminant validity is defined as the extent to which the indicators of construct are distinct from the items of other latent variables (Bagozzi *et al.*, 1991; Peter, 1981; Peter and Churchill, 1986). Discriminant validity was based on the calculation average variance extracted (AVE) for each construct. If estimate of AVE is greater than the squared correlations estimate for other constructs, then discriminant validity is achieved (Fornell and Larcker, 1981). Lastly, nomological validity tests took place to examine the hypothesised relationships between construct and the empirical links between indicators and their underlying dimensions (Peter, 1981; Peter and Churchill, 1986).

Table 4. 15: Scale psychometric properties for the present study

Properties	Explanation	Assessment criteria/	References
		techniques	
Unidimensionality	Refers to the existence of a	Confirmatory Factor	McIver and
	single construct underlying a	Analysis (CFA)	Carmines (1991);
	set of measures		Peter and Churchill
			(1986)
Internal	Measures whether several	Cronbach Alpha	Nunnally and
consistency	items that propose to measure	Composite reliability	Bernstain (1994);
reliability	the same general construct	Individual item reliability	Hair et al., (2010)

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	produce similar scores		
Convergent validity	The extent to which independent measures of the same construct converge or are highly correlated.	Average variance extracted (AVE)	Fornell and Larcker (1981); Henseler <i>et al.</i> , (2009)
Discriminant validity	The extent to which constructs diverge from the other operationalisations for which the construct is conceptually distinct	Fornell and Larcker criterion Cross loadings	Fornell and Larcker (1981); Chin (1998)
Nomological validity	Examining whether the correlations among the constructs in a measurement theory make sense	Matrix of constructs correlations	Hair et al., (2010); Peter, (1981); Peter and Churchill, (1986)

Source: Developed for the current study

4.4.6 Assessment of the Structural Model

In a structural equation model, the technique allows the relationship between continuous or discrete independent variables and dependent variables. Therefore, SEM offers the most appropriate and competent estimation technique for a series of separate multiple regression equations into a simultaneous statistical test (Hair *et al.*, 2010). SEM calculates the overall model fit (structural model) by verifying the consistency of a theoretical model and the estimated model (Diamantopoulos and Siguaw, 2000; Hair *et al.*, 2010; Tabachnick and Fidell, 2007).

Many methods may be used to develop the overall model fit based on incremental and absolute goodness of fit measures. However, under different conditions model complexity, estimation procedure, sample size, violation of underlying assumptions of multivariate normality and variable independence can be superior to others. Therefore, this research used two separate stages of model testing, as suggested by Anderson and Gerbing (1982, 1988). One of the main stages was to test the casual relationships between latent constructs (Anderson and Gerbing, 1988; Chau, 1997; Diamantopoulos and Siguaw, 2000). Prior to this stage, confirmatory factor analysis (CFA) was used to confirm the relationship between a construct and its indicators (Anderson and Gerbing, 1988; Chau, 1997; Diamantopoulos and Siguaw, 2000).

Following this, the next stage to examine the causal relationship among the constructs, structural equation modelling (SEM) was applied. It is also known as 'path analysis with latent variables' (Bagozzi, 1984) which functions as theoretical model testing. The consistency of the theoretical model and estimated model based on the observed values are confirmed with the overall fit of a structural model (Diamantopoulos and Siguaw, 2000; Hair *et al.*, 2006). In testing the overall model fit, there are many methods in a statistic that can be used; however, no single method is absolute. Kline (1998) suggests at least four tests are a best indicator for good fit: (a) chi-square (χ^2); (b) GFI, NFI or CFI; (c) NNFI; and (d) SRMR. On the other hand, the most common fit indices used by researchers are chi-square (χ^2), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), and Root Mean Square Error Approximation (RMSEA). The current research used a number of criteria to evaluate the structural model (see table 4.16).

Table 4. 16: Goodness of fit measures for structural equation modelling

Model fit criterion	Acceptable level	References
Absolute fit measure:		
Goodness-of-fit index (GFI)	>.90. Value close to .95 reflects a good	Hair et al., (2006); Doll et
	fit; value .80 to .89 are indicated of	al., (1994); Diamantopoulos
	reasonable fit	and Siguaw (2000)
Root mean square error of	Acceptable <.80, good fit ,.50, marginal	_
approximation (RMSEA)	fit <.90	
Incremental fit measures:		
Normated fix index (NFI)	>.90 and above is mostly recommended	Hair et al., (2006)
Tucker-Lewis index (TLI)	>.90. Values close to .95 reflect a good	Hair et al., (2006)
	model fit.	
Adjusted goof-of-fit index (AGFI)	>.90 considered a good fit80 to .89 are	Hair et al., (2006); Doll et
	considered to be reasonable fit	al., (1994)
Comparative fit index (CFI)	>.90	Hair <i>et al.</i> , (2006); Mueller
		(1996)
Incremental fit index (IFI)	>.90	Hair et al., (2006)
Parsimonious fit measures:		
Normed chi-square (CMIN/DF)	Lower limit: 1.0 and upper limit 2.0/3.0	Diamantopoulos and Siguaw
	or 5.0	(2000)

Source: Developed for the study

4.5 Summary

In summary, this chapter has discussed the rationale of the research methodology and the techniques of analysis. In order to develop and validate a measurement scale for the constructs in the model, standard procedures suggested by Churchill (1979) and Netemeyer et al (2003) were mainly employed. There are three stages of data collection in this study. First, an in-depth interview (qualitative research) was conducted to explore the new insights into the subject of interest and to support the design of the research instrument. From this the first draft of the quantitative questionnaire was designed, on the basis of the items generated from interviews and the existing literature. Second stage, a pilot study was conducted to check the reliability of the instruments and purifying the measurement items through exploratory factor analysis (EFA). Subsequently, questionnaires containing the purified items were prepared for the main survey. In the final stage, the main survey data was obtained from 223 respondents and a confirmatory factor analysis (CFA) was performed. The reliability and validity of the scales were then assessed through the use of CFA. The structural model and the research hypotheses were evaluated. Software packages such as AMOS 18.0, SPSS 15.0 for Windows, and NVivo 9.0 were also utilised to facilitate the analysis of data. In the next chapter, the main survey data are analysed and discussed in detail.

CHAPTER 5: DATA ANALYSIS

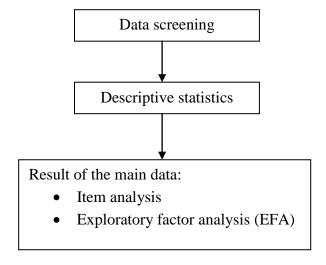
5.1 Introduction

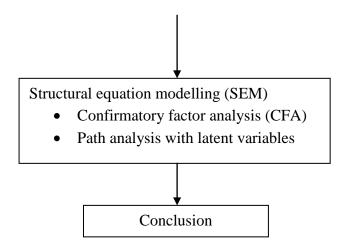
This chapter is concerned with evaluating and disclosing the relationships between independent and dependent variables. The chapter comprises the following sections: introduction; data management; data screening proceeding to analysis; demographic peculiar factor loading and data analysis; hypothesis testing and conclusion.

5.2 Data Management

Chapter 4 identified the research methodology used in the current study while this chapter provides a detailed process of data analysis and the results. The process started with data examination and screening to prepare for subsequent quantitative analyses and then the descriptive statistics are presented. Prior to achieved acceptable level of reliability for further analysis, a reliability test was performed on measurement scales. In the following step, each multi-item measurement scale was subjected to an exploratory factor analysis (EFA) to discover its underlying dimensions. Then, confirmatory factor analyses (CFA) were used to re-assess resulting solutions. Finally, structural equation modelling (SEM) was employed to test the hypothesised relationships between the research constructs as proposed in the theoretical model, and to assess the overall goodness of-fit between the postulated model and the collected data set. Conclusions are drawn in the last section.

Figure 5. 1 : Data analysis steps for main survey





Source: Developed for the current research

5.3 Data Screening and Characteristics of Sample

This section follows the procedure suggested by Hair *et al.*, (2010), in which the data are examined and descriptive statistics are reported. Several issues have an impact on the outcome of variables or relationships of variables such as missing data, outliers, linearity, normality, homoscedasticity and multicollinearity. To overcome this issue, Tabachnick and Fidell (2007) outline the procedure of data screening. In the first stage, the researcher searches for missing values and substantive missing data in the questionnaires because of poor-quality responses. For example, those whose answers are either extreme or neutral on all items in the questionnaire are removed prior to analysis. Second, all variables of interest are calculated and examined with descriptive statistics. Third, the normality of the data distribution of the variable is examined. Finally, the process of identifying outliers at the univariate and multivariate levels takes place. SPSS 15.0 software is used for all tests and the result of each process is described below.

5.3.1 Missing Data Analysis

Missing data occur in the multivariate analysis when the valid values in one or more variables are not available for analysis (Hair *et al.*, 2010). This occurs when the respondent does not answer one or more survey questions or errors occur during data entry. There are two types of missing data (Hair *et al.*, (2010). First, missing data that cannot be known, which is expected

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and part of the research design. In this case, there is no need for a specific remedy because the allowances for missing data are inherent in the techniques used.

Second, unclassified missing data exist because it is not known to occur for many reasons and in many cases (Hair *et al.*, 2010). In this case, the missing data is divided into two classes-known versus unknown processes, based on their sources. First, the researcher knows the missing data processes, as they are identified in a factor's procedures, such as errors in data entry that create invalid code, the failure to complete all survey questionnaires, or the morbidity of the respondents. At this point, control over the missing data process by a researcher is reduced, but some ways may be applicable if the missing data is random. Second, the unknown missing data processes are difficult to identify and accommodate. Usually, this condition is directly related to the respondent. One example is the refusal to reply to certain questions, such sensitive questions (for example, controversial issues or income). In this study, online surveys are employed in which the technical aspects allow for no missing values. Unless each question is completed, the respondent will not be able to continue and the 'save' button will not be activated.

5.3.2 Non-Responses Bias

Since the response rates were relatively low (24%), tests for non-response bias were performed to examine whether the questionnaires received from online survey did not statistically differ from those received later from the drop and collect technique. According to Field (2009), the researcher used the t-test analysis technique to compare the means of all manifest variables for two data collection techniques. As discussed in sub section 4.4.2, the first groups were defined as the questionnaires which were collected from the online survey, whereas the second groups were the questionnaires collected from drop and collect technique.

According to Table 5.1, the t(221) = -1.431, p > .05 for overall comparisons showed that there was no significant difference between variables of two data collection techniques. This confirmed the statistical calculations and indicated that the non-response bias was not a significant problem in this research.

Table 5. 1 T-test Results (Non Responses Bias)

Variable	Group	N	Mean	t	df	p
CCM	1	135	66.61	-1.517	221	.470
	2	88	68.92			

p > .05

5.3.3 Outliers' Detection

According to Hair et al. (2010) outliers are "observations with a unique combination of characteristics identifiable as distinctly different from the other observations" (p.64). Outliers might be the effects of extreme values (very high or very low scores) and could result in nonnormality data and create a critical problem for multivariate data analysis (Hair et al., 2010; Tabachnick and Fidell, 2007). In SEM analysis identifying the outliers is essential because it may affect the SEM, even if the majority of data is normally distributed (West et al., 1995). Outliers can be detected by using univariate, bivariate and multivariate methods. This is in line with a suggestion by Hair et al., (1998) that more than one method should be used by a researcher to identify outliers in a consistent format. To identify univariate outliers, which are cases with an extreme value on one variable, the researcher can examine the distribution of observation for each variable (Hair et al., 2010). Therefore, to detect univariate outliers, all raw scores for a variable in the distribution are changed to standard scores. For research with a small sample size, 80 cases or fewer, the outliers exist when the standard score is ± 2.5 or beyond (Hair et al., 2010). However, for sample sizes of larger than 80 cases, the standard score of ± 3.0 or beyond is set to determine the outliers. In this analysis, the result indicates the data contains a number of univariate outliers.

The second method is bivariate outliers that can be assessed by applying a pair of variables jointly through a scatter plot where cases fall markedly outside the range of the other observations and are seen as isolated points (Hair *et al.*, 2010, p.66).

In the third method, multivariate outliers can be used, which consist of unusual combinations of scores on two or more variables. Thus, the multivariate detection method of dealing with outliers is more useful for multidimensional positions of variables. Multivariate outliers can

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be identified by the Mahalanobis D^2 measure (Hair *et al.*, 2010; Field, 2009). The Mahalanobis D^2 with the larger value for a case and the smaller its corresponding probability value, the more likely the cases are to be multivariate outliers. A value exceeding 2.5 (D^2 /df) in small samples and 3 or 4 (D^2 /df) in large samples can be designated as a possible outliers (Hair *et al.*, 2010, p.66-67). Because this research has a larger sample (223), the value 3.0 standard scores to identify multivariate outliers is an appropriate cut off point. If there is no proof that outliers truly deviate from the normal and are not representative of any observation of the population, they should be retained (Hair *et al.*, 2010).

In several cases, problematic outliers can be accommodated in a way that will not seriously distort the analysis. To confirm the outliers' effect on the objectives of this study, univariate outliers were detected by using a graphical method, and multivariate outliers were found by applying Mahalanobis's distance case. Figure 5.2 of the box plot of univariate outliers was found in one case which is marked with an asterisk, and also compared with the multivariate outlier by Mahalanobis's distance test, which confirm the samples (Table 5.1).

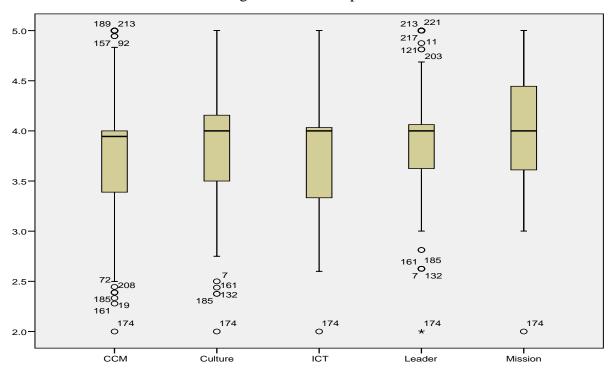


Figure 5. 2: Inbox plot

Table 5. 2: Univariate and multivariate outliers results

Univariate Outliers

Multivariate Outliers

Case with exceeding	standard values + 2.5	Case with a value of D ² /df Greater than 3.0 (df=5)			
		Case	D^2	D ² /df	
CCM	No cases	71	15.84	3.17	
CC	No cases	92	17.93	3.59	
ICT	No cases	209	20.12	4.02	
CL	174	223	19.34	3.87	
MA	No cases				

a. Mahalanobis D^2 value based on the five variable perceptions

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion Innovation, LDR = Corporate Leadership, MA = Mission Achievement

Source: Developed for the study

5.3.4 Normality, Linearity, Homoscedasticity and Multicollinearity

The researcher should ensure data are normally distributed and the relationships between the variables are confirmed before progressing to infer results from the data. The fundamental assumption will shape the research data to show the variation in multivariate analysis. Therefore, the variables with each other must normally be distributed (Tabachnick and Fidell, 2007). In the next section, the normality, linearity, homoscedasticity and multicollinearity of data are screened before inferring results from the data.

5.3.4.1 Normality

Following evaluation of missing data and outlier detection, normality of data distribution is assessed. Normality of data refers to data distribution, which is a primary assumption in multivariate analysis, especially in structural equation modelling. It can be measured based on their variation from a normal distribution but, if large enough, statistical tests are not valid (Hair *et al.*, 2010; Tabachnick and Fidell, 2007). However, these are not always required for normality test in analysing the data, but found to be better if the variables are normally distributed (Tabachnick and Fidell, 2007).

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The statistical method can assess the normality of the data (Hair *et al.*, 2010; Tabachnick and Fidell, 2007). Kurtosis and Skewness test and the Kolmogorov and Shapiro method are primarily used by researchers to test the normality of data distribution (Field, 2009; Hair *et al.*, 2010; Tabachnick and Fidell, 2007). This study applies SPSS 15.0 for initial descriptive statistics to identify skewness and kurtosis. Data screening results for each individual variable are shown in Table 5.2 for the variables analysed in the study, with means, standard deviations, skewness and kurtosis values. All variables are found to be normally distributed; values for skewness and kurtosis are found to be mixed, both negative and positive. As reported, the value of skewness is between -0.172 and 0.096; and the value of kurtosis is between -0.527 and 0.120 respectively. The results indicate that the data of the study are within the acceptable level of normality assumption. Data does not violate the normality assumption if the skewness is lower than 3.00 and kurtosis is lower than 10.00 (Kline, 1998).

In addition, Kolmogorov-Smirnov and Shapiro-Wilk statistic tests (Field, 2009) are employed to examine the data normality. This is calculated for each variable (Shapiro and Wilk, 1965) and the tests are found significant for all variables (Table 6.3) which is non normality. Field (2009)) has justified that a test with a large sample size (e.g. 223 in this study) is very sensitive, and a minor deviation from normality is enough to bias any statistical procedures that we apply to the data. Thus, a significant test does not reveal departure from normality of data (Field, 2009, p.144).

Table 5. 3: Skewness and Kurtosis values

		Std.								
	N	Minimum	Maximum	Me	ean	Deviation	Skev	vness	Kurt	tosis
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
CCM	223	2.00	5.00	3.7511	.04153	.62019	172	.163	.120	.324
CC	223	2.00	5.00	3.9016	.04190	.62571	131	.163	212	.324
ICT	223	2.00	5.00	3.8655	.04378	.65378	.096	.163	527	.324
CL	223	2.00	5.00	3.9168	.04193	.62620	045	.163	253	.324
MA	223	2.00	5.00	4.0082	.04133	.61718	054	.163	391	.324

Valid N 223 (list wise)

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion Innovation, CL = Corporate Leadership, MA = Mission Achievement

Source: Developed for the current study

Table 5. 4: Test of normality

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CCM	.169	223	.000	.944	223	.000
CC	.137	223	.000	.957	223	.000
ICT	.167	223	.000	.941	223	.000
CL	.178	223	.000	.932	223	.000
MA	.169	223	.000	.928	223	.000

a Lilliefors Significance Correction

Note: df=degree of freedom, Sig. = Significance

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion Innovation, CL = Corporate Leadership, MA = Mission Achievement

Source: Developed for the current research

5.3.4.2 Homoscedasticity

Homoscedasticity refers to the level of homogeneity of variance that assumes dependent variable(s) exhibit equal levels of variance across the range of predictor variable(s) (Hair *et al.*, 2010, p.74). Thus, the normality is assumed because when the multivariate normality assumption is met, the relationships between variables are homoscedasticity (Field, 2009; Tabachnick and Fidell, 2007). Homoscedasticity can be assessed graphically, as well as statistically (Field, 2009; Hair *et al.*, 2010).

First, visual scatter plots are produced for a fair level of homoscedasticity. The data is scattered evenly around the horizontal line of the plots, and does not submit any concerns about heteroscedasticity. Second, a Levene test (Levene, 1960) is used to examine each metric of variables across the non-metric variables in the data set (for example, gender). This study employed a Levene test and the test results from the p-value of nine factors below the critical value of 0.05. These items (CCM28, CC04, CC16, ICT16, ICT21, CL10, CL11, CL16, and CL17) indicate a lack of homogeneity (see Appendix 5.1). Nevertheless, the large sample size (N=223) in the Levene test makes it sensitive and possibly significant, which does not mean that there is a substantial departure from normality of data (Field, 2009, p.98). Therefore, items remain for further analysis, because in this study, those items are identified as important in detailing the reasons for perceived CCM, corporate culture, ICT diffusion innovation and corporate leadership constructs.

5.3.4.3 Linearity

The correlation between constructs is represented by a straight line referred to as linearity. It is important in data analysis to gauge the relationship between variables. An implicit assumption of all multivariate techniques based on correlation measures of association, including multiple regression, logistic regression, factor analysis and structural equation modelling, is linearity (Hair *et al.*, 2010, p.76). Thus, researchers need to examine the association of variables to identify any emissions that may affect the correlation. Therefore, linearity can be measured statistically by the Pearson correlation or scatter plot (Field, 2009; Hair *et al.*, 2010; Tabachnick and Fidell, 2007). In this study, Pearson's correlation showed all independent variables on the dependent variable were significantly positive (Table 5.5). In addition, a linear regression analysis among variable, with CCM being the dependent variable, the results showed the presence of linear relationship among the dependent and independent variables. Figure 5.3 displays the normal p-p plot of regression standardized residual. This confirms the results of this test, showing that all variables are linear to each other.

Table 5. 5: Pearson's correlations

	CCM	CC	ICT	LDR	MA
CCM	1				
CC	.757**	1			
ICT	.613**	.614**	1		
CL	.681**	.768**	.614**	1	
MA	.702**	.796**	.673**	.795**	1

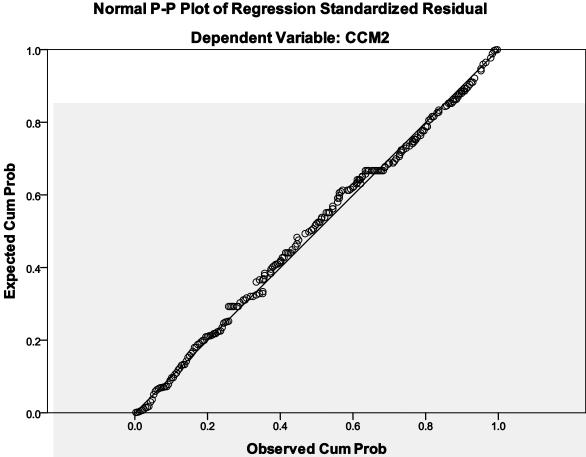
p* < .05; *p* < .01

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion

Innovation, CL = Corporate Leadership, MA = Mission Achievement

Source: Developed for the study

Figure 5. 3: Linearity between independent and dependent variables



5.3.4.4 Multicollinearity

Multicollinearity occurs when there is strong correlation between two or more variables in the model. A high level of multicollinearity will increase the standard errors of the b-coefficients, and will generate a threat to the model, which can be problematic to multivariate analyses. Multicollinearity can be identified by checking the correlation matrix for high correlations (for example, >.80). In this study, the correlation matrix is checked and there are no correlations above >.80 (see Appendix 5.2). Another method to diagnose multicollinearity is to check the variance inflation factor (VIF) and collinearity diagnostics of tolerance statistics. According to Myers (1990) if the VIF is greater than 10 and the tolerance is below than 0.1, a serious problem is indicated. In the current study, the largest value of VIF is 24.451 as the

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highest value exceeds the threshold value of 10, and there are several items with tolerance below 0.1 (Menard, 1995). Therefore, 16 items are deleted (CCM04, CCM21, CCM23, CCM31, CC01, ICT02, ICT23, CL03, CL09, MA07, MA08, MA10, MA11, MA12, MA13, MA14) because of the multicollinearity issue of the data.

In summary, the data indicates a problem in these preliminary analyses. Besides containing outliers, the data also has a high variance inflation factor (VIF) in the multicollinearity test for some items. Therefore, several items are dropped because they do not meet the requirement of multivariate analysis. The next step is to analyse the data where the factor structures of the constructs, and the reliability estimates are examined.

5.3.5 Demographic Characteristics and Relationships

Table 5. 6: Demographic profile of Malaysian companies' main survey sample (N=223)

Sample size (n)	%	N
Organisation sectors		
Consumer Products	19.7	44
Industrial Products	26.0	58
Construction	5.4	12
Trading/Services	18.8	42
Technology	10.8	24
Infrastructure Project Companies (IPC)	0.4	1
Finance	3.6	8
Hotels	0.9	2
Properties	9.9	22
Plantations	4.0	9
Mining	0.0	0
Real Estate Investment Trust (REITS)	0.4	1
Total	100	223
Year of establishment		
Less than 4 years	12.6	28
4-8 years	9.9	22
8-12 years	5.8	13
More than 12 years	71.7	160
Total	100	223
The total number of employees		
100 or less	15.2	34
101-300	13.0	29
301-500	19.3	43
501-700	4.5	10
701-900	1.3	3
More than 900	46.6	104
Total	100	223

Source: Developed for the study

Table 5.6 outlines the demographic characteristic of the sample by respondent and companies. A total of 1,020 online questionnaires were sent to public listed companies in the MSE to be distributed to corporate communications or public relations managers. 223 responses were received representing 23.23% rate of response. In the sample, 26.0% of the respondents are in the industrial products sector, 19.7% in consumer products, 18.8% in trading/services, 10.8% in technology, 9.9% in properties, 5.4% in construction, 4.0% in plantations, 3.6% in finance, 0.9% in hotels, 0.4% in REITS and IPC each and none in the mining sector.

In terms of length of establishment, 71.7% of the companies have been established for more than 12 years, 12.6% less than four years, 9.9% between four to eight years and 5.8% between eight to 12 years. With regard to the total number of employees, 46.6% of companies have more than 900, 19.3% between 301 to 500 employees, 15.2% have 100 employees or less, 13.9% between 101 to 300 employees, 4.5% between 501 to 700 employees and 1.3% between 701 to 900 employees.

Table 5. 7 : Demographic profile of Malaysian corporate communication and public relations practitioners' main survey sample (N=223)

Sample size (n)	%	N
Age		
Less than 30	26.9	60
31-40	37.7	84
41-50	25.1	56
More than 51	10.3	23
Total	100	223
Gender		
Male	40.8	91
Female	59.2	132
Total	100	223
Job position		
CEO/Director	6.7	15
General Manager	11.7	26
Manager	39.0	87
Executive	27.4	61
Other	15.2	34
Total	100	223
Level of education		
SPM/STPM	0	0
Diploma	9.9	22
Degree	60.5	135
Masters	29.1	65
PhD	0.4	1
Other	0	0
Total	100	223
Number of years worked with the company		

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Less than 5	52.0	116
5-10	21.5	48
11-15	14.3	32
More than 15	12.1	27
Total	100	223
Number of years in present position		
Less than 2	29.1	65
2-4	38.6	86
4-6	11.2	25
More than 6	21.1	47
Total	100	223

Source: Developed for the study

Demographic profiles are provided in Table 5.7. Results show that the majority of respondents are females (59.2%); most are between the ages of 31 to 40 (37.7%). The majority of corporate communication practitioners work as manager (39.0%), followed by executive (27.4%), general manager (11.7%), CEO/director (6.7%) and others (15.2%). Results also show that a high percentage (60.5%) of the respondents are educated to degree level; and with regard to work experience, the results indicate that only 12.1% of the respondents have more than 15 years experience while more than half of the respondents (52.0%) have been working for less than five years. However, 21.1% of respondents have worked for more than six years, and the majority (38.6%) have two to four years working in their current position.

5.4 Factor Loading and Data Analysis

Factor analysis techniques are used for data reduction, which takes a number of different variables and attempts to discover any underlying dimensions at which variables may be present (Crawford and Lomas, 1993). The group of variables produced in this analysis show the relationship of variables to the factor. This data reduction is achieved by looking for variables that correlate highly with a group of other variables, but do not correlate with variables outside that group (Field, 2009, p.629). More sspecifically, factor analysis provides the tools for analysing the structure of the interrelationships (correlations) among a large number of variables by defining sets of variables that are highly interrelated, known as factors (Hair *et al.*, 2010, p.94). Field (2009, p.628) has to define three main uses of factor analysis.

- 1. To understand the structure of a set of variables
- 2. To construct a questionnaire to measure any underlying variables

3. To reduce a data set to a more manageable size while retaining as much of the original information as possible.

The primary purpose of conducting EFA in this analysis is to define the underlying structure among the variables (Hair *et al.*, 2010). In SPSS 15.0 software, many procedures are provided for factor extraction and rotation, one of which is principal component analysis (PCA), the default method of extraction and the most widely used in many popular statistical software packages such as the SPSS programme. According to Tabachnick and Fidell (2007), in these analyses, the maximum variances are extracted from the data set of each component. Principal component extraction is the linear combination of observed variables that maximally separate subjects by maximising the variance of their component scores (Tabachnick and Fidell, 2007, p.635).

5.4.1 Communalities

Eigenvalue and scree plot are commonly used to assess the sufficiency of extraction and the number of factors. Prior to moving on to extract factors, it is essential to determine the variability in scores (the variance) for any given measures (or variables) (Field, 2009). According to Tabachnick and Fidell (2007) communality is the total of squared loadings for variable across factors. A variable that has no specific variance (or random variance) would have a communality of 1, while a variable that shares none of its variance with any other variables would have a communality of 0 (Field, 2009, p.637). A model containing multiple constructs requires 0.5 or less for communalities and 0.7 or less for larger sample size for model stability (Hair *et al.*, 2010). However, according to De Vaus (2002), variables with communalities of less than 0.6 should be dropped from the analysis, because they are deemed as not contributing to the variance explained. This study shows communality values of above 0.6, which is high variation from 0.627 to 0.869, thus, all variables were retained.

Table 5. 8 : Communalities

	Initial	Extraction		Initial	Extraction
CCM03	1.000	.798	ICT13	1.000	.831
CCM05	1.000	.709	ICT15	1.000	.807
CCM11	1.000	.744	ICT16	1.000	.804
CCM13	1.000	.762	ICT18	1.000	.710
CCM14	1.000	.788	ICT20	1.000	.823
CCM16	1.000	.824	ICT21	1.000	.667
CCM18	1.000	.847	CL01	1.000	.778
CCM19	1.000	.840	CL02	1.000	.819
CCM24	1.000	.815	CL04	1.000	.781
CCM26	1.000	.816	CL05	1.000	.838
CCM27	1.000	.843	CL06	1.000	.851
CCM28	1.000	.805	CL07	1.000	.821
CCM29	1.000	.754	CL08	1.000	.851
CCM30	1.000	.738	CL10	1.000	.792
CC01	1.000	.627	CL11	1.000	.781
CC02	1.000	.720	CL12	1.000	.763
CC03	1.000	.758	CL16	1.000	.760
CC04	1.000	.773	CL17	1.000	.718
CC06	1.000	.751	CL18	1.000	.728
CC07	1.000	.733	CL19	1.000	.650
CC08	1.000	.864	MA01	1.000	.799
CC09	1.000	.869	MA02	1.000	.813
CC11	1.000	.728	MA03	1.000	.831
CC12	1.000	.706	MA04	1.000	.855
CC13	1.000	.788	MA05	1.000	.849
CC14	1.000	.744	MA06	1.000	.839
CC16	1.000	.718	MA09	1.000	.844
CC17	1.000	.781	MA15	1.000	.794
CC18	1.000	.814	MA16	1.000	.776
CC19	1.000	.804	MA19	1.000	.744
ICT03	1.000	.759	MA20	1.000	.784
ICT04	1.000	.735			
ICT05	1.000	.869			
ICT07	1.000	.865			
ICT08	1.000	.819			
ICT10	1.000	.826			
ICT12	1.000	.823			

Extraction Method: Principal Component Analysis.

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion Innovation, CL = Corporate Leadership, MA = Mission Achievement

Source: Developed for the study

5.4.2 Eigenvalue

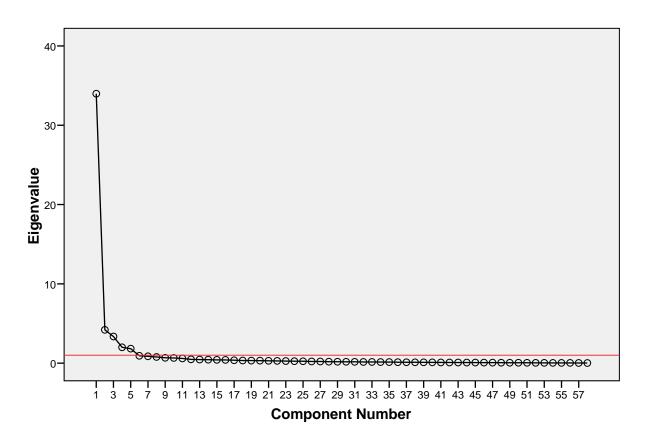
Eigenvalues and variance are used to identify the number of factors to extract, which indicates the substantive importance of the factor (Hair *et al.*, 2010; Nunnally and Bernstein, 1994). According to Tabachnick and Fidell (2007, p.644), a quick estimate of a number of factors is obtained from the size of the eigenvalues reported as part of an initial run with principal component extraction. Each variable for component analysis variance is contributing 1, thus is not important for a component with an eigenvalue less than 1 (Field, 2009; Hair *et al.*, 2010; Tabachnick and Fidell, 2007). Therefore, factors are considered significant for eigenvalues greater than 1; and all factors with latent roots less than 1 are considered not significant and are disregarded (Hair *et al.*, 2010, p.109). In this study, there are six extracted factors from the data which have an eigenvalue greater than 1 (Appendix 5.3) which shows a high value for the first factor, followed by smaller eigenvalues, successively. The number of factors indicated by this criterion is probably about right if there are a reasonable number of factors for the data. However, for other situations, this criterion is likely to overestimate the number of factors in the data set (Tabachnick and Fidell, 2007, p.644).

5.4.3 Scree Plot

The numbers of extraction factors are identified by eigenvalues, while scree plot is primarily used to confirm the maximum number of factors by examining the graph. Basically, a scree plot extracts the optimum number of factors before the amount of unique variance begins to dominate the common variance structure (Cattell, 1966). According to Hair *et al.*, (2010), "the scree test is derived by plotting the latent roots against the number of factors in their order of extraction, and the shape of the resulting curve is used to evaluate the cut off point" (p.110). Generally the scree plot negatively decreases; the eigenvalue is highest for the first factor and moderate but decreasing for the next few factors before reaching small values for the last several factors (Tabachnick and Fidell, 2007, p.644). As a result, the number of factors based on a scree plot test on data is confirmed as the same with extracted factors through eigenvalues (Figure 5.4).

Figure 5. 4 : Scree plot

Scree Plot



5.4.4 Exploratory Factor Analysis (EFA)

Exploratory factor analysis is conducted to investigate the factorial structure of the scales to identify groups of variables (Field, 2005, p.619). Therefore, the data analysis for exploratory factor analysis uses orthogonal and oblique rotation (Field, 2009; Hair *et al.*, 2010; Tabachnick and Fidell, 2007). Rotation is essential to enhance the interpretability and scientific utility of the solution which is to simplify and clarify the data structure (see Appendix 5.4). The purpose of this analysis is to maximise high correlations between factors and variables and minimise those which are low. Moreover, a rotation technique is very useful compared to others to develop factors from variables (Field, 2009).

Generally, orthogonal rotation is an appropriate method to drop the variables number to smaller subsets. Unlike oblique methods that allow the factors to correlate, orthogonal rotations produce factors that are uncorrelated. In addition, orthogonal solutions offer ease of interpreting, describing and reporting results, yet they strain 'reality' unless the researcher is convinced that the underlying process is almost independent while oblique is vice versa (Tabachnick and Fidell, 2007, p.637-638). Conventional understanding prefers an orthogonal rotation approach, because it produces more easily interpretable results. Varimax orthogonal techniques are applied in this study, which is most normally used in rotation for maximising variance. The main objective of Varimax rotation is to maximise the variance of factor loading by making high loadings higher and low ones lower for each factor (Tabachnick and Fidell, 2007, p.620).

The results for the Kaiser-Meyer-Olkin value in this study was 0.949, higher than the recommended value of 0.6 and the Bartlett Test of Sphericity reached a statistical significance, which means the forcibility of the correlation matrix is supported. The rotated component matrix of the scale is shown in Appendix 5.3. Principal Component Analysis indicates the presence of six components with eigenvalues greater than 1, explaining 57.61%, 7.24%, 5.59%, 3.70%, 2.90% and 1.57% of the variance respectively which, as a scree plot, reveals a clear cut-off of these components. However, the results indicate only five variables, with a strong loading on components in the presence of a simple structure, while one variable has poor load and cross loading to other variables. According to Hair *et al.*, (2010), factor loadings above +/-0.50 are considered practically significant and any items that show substantial and similar loadings on more than one factor are excluded. Therefore, since only one item loaded to this variable and the loading factor was also less than 0.50, the variable was deleted.

After factors derived from the EFA, each loaded factor is assessed using Cronbach's alpha measure in order to test internally consistence (Carmines and Zeller, 1979; Parasuraman *et al.*, 1988). This method is widely used in many social sciences research (Churchill *et al.*, 1974; Churchill, 1979; De Vaus, 2002). According to De Vaus (1996) and Nunnally (1978) values of 0.70 or more are considered to be of an acceptable level of reliability. The next section demonstrates clusters of items are specified relevant dimensions of the elements.

Table 5. 9: Factor loading and Cronbach's Alpha for corporate communication management

Variables	France and Dalated Items	Factor	Cronbach's
Variables		Loading	Alpha
CCM03	We manage the advertisements, marketing and promotion (AMP) programme for the company's brand positioning	.758	.977
CCM05	We are involved in content development of corporate advertising and other advertisement materials.	.748	
CCM11	We are responsible to produce publications for the company (e.g. newsletter, company profile and corporate brochures).	.744	
CCM13	We organise Corporate Social Responsibilities (e.g. sponsorship, charities and education) programmes for stakeholders' engagement and participation.	.705	
CCM14	We control the content of electronic publication (e.g. e-newsletter, electronic press releases and corporate website) for our company.	.721	
CCM16	We organise external events (e.g. awareness campaign, trade exhibition and product launch) to keep board members and employees engaged with external stakeholders.	.794	
CCM18	Our work includes speech writing, translations and a documentation process for various important documents.	.805	
CCM19	We organise media programmes (e.g. media night or golf with media) to build a relationship with the media.	.759	
CCM24	We work with the company secretary to organise the annual general meeting where the company will announce the annual financial results to the shareholders.	.775	
CCM26	We work closely with the finance department to prepare the annual report and quarterly financial report.	.749	
CCM27	We provide information and manage relationships with the investors through various programmes (e.g. investor relations programme and annual general meeting).	.747	
CCM28	We create a positive context and better perspective on financial data to show positive performance of the company.	.734	
CCM29	We provide training (e.g. communicate to the public and understand the public needs) at a lower level up to highest level to build internal branding for the company.	.738	
CCM30	We help the company create open communication within the organisation during a particular crisis (for example, sales drop, economic down turn or merger and acquisition)	.686	

Source: Developed for the study

Factor 1 – Corporate Communication Management (CCM): This factor covers the corporate communication management concerning managers' responses on their organisational practice. Fourteen items are applied based on multiple literature review and interview scale for CCM to the public listed companies in Malaysia (with slight alterations) for the construct. The entire item loaded in the same factor, which is more than 0.5 (Field, 2009) and no item is deleted.

Table 5. 10: Factor loading and Cronbach's Alpha for corporate culture

Variables	Factor and Related Item	Factor Loading	Cronbach's Alpha
CC01	My organisation is a very personal place. It is like an extended family. People seem to share a lot of themselves.	.629	.974
CC02	The head of my organisation is generally considered to be a mentor,	.684	

sage, or a father or mother figure. CC03 The glue that holds my organisation together is loyalty and .728 tradition. Commitment to this firm runs high. CC04 My organisation emphasises human resources. High cohesion and .693 morale in the firm are important. CC06 My organisation is a very dynamic and entrepreneurial place. .726 People are willing to stick their necks out and take risks. CC07 The head of my organisation is generally considered to be an .623 entrepreneur, and innovator, or a risk taker. CC08 The glue that holds my organisation together is a commitment to .694 innovation and development. This is an emphasis on being first. CC09 My organisation emphasises growth and acquiring new resources. .703 Readiness to meet new challenges is important CC11 My organisation is a very formalised and structural place. .636 Established procedures generally govern what people do. CC12 The head of my organisation is generally considered to be .628 coordinator, an organiser, or an administrator CC13 The glue that holds my organisation together is formal rules and .656 policies. Maintaining a smooth running institution is important here. CC14 My organisation emphasises permanence and stability. Efficient, .679 smooth operations are important. CC16 My organisation is very production oriented. A major concern is .670 with getting the job done, without much personal involvement. CC17 The head of my organisation is generally considered to be a .671 producer, a technician, or a hard-driver. CC18 The glue that holds my organisation together is the emphasis on tasks and goal accomplishment. A production orientation is .627 commonly shared. CC19 My organisation emphasises competitive actions and achievement. .652 Measurable goals are important.

Source: Developed for current study

Factor 2 – Corporate Culture (CC): This factor includes the managers' experience of corporate culture in their organisation. A 16 items scale is applied, developed by Deshpande and Farley (1999). Applying a factor loading at 0.5 (Field, 2006) all 13 items are included (Table 5.10).

Table 5. 11: Factor loading and Cronbach's Alpha for ICT diffusion innovation

		Factor	Cronbach's
Variables	Factor and Related Item	Loading	Alpha
ICT03	I am given enough time to learn about the ICT tools that I am expected to use here	.704	.974
ICT04	I am given enough flexibility in my job demands (in terms of rescheduling daily demands and activities and so on) to learn how to apply ICT tools that I am expected to use here	.730	
ICT05	Our work procedures support our capacity to use ICT tools that I am expected to use here	.862	
ICT07	Organisational technical support is sufficient (e.g., help desk, and getting software operational) to allow me to learn about and apply ICT tools that I am expected to use here.	.851	
ICT08	Mentoring support is sufficient to allow me to learn about and understand how to effectively apply the ICT tools that I am expected to use here	.740	

ICT10	The result/benefit of using ICT tools that I am expected to use here were easy to observe	.831
ICT12	My immediate supervisor encourages me to learn about and/or apply ICT tools that I am expected to use here	.852
ICT13	I enjoy learning from others about applying ICT tools that we are expected to use here	.835
ICT15	My immediate supervisor in my organisation is open to suggestions on improving the way that ICT tools that I am expected to use here are used	.776
ICT16	Our organisation supports our ability to share experience of ICT tools that I am expected to use here.	.820
ICT18	The management is very supportive and understand that ICT can help business become more efficient and make our work better.	.697
ICT20	Our organisation provides tangible rewards (bonus, promotion, and	760
	so on) to those who share ideas and experience about ICT tools that I am expected to use here	.769
ICT21	Our organisation provides intangible rewards (recognition, thanks or public praise) to those who share ideas and experience about ICT tools that I am expected to use here	.701
		·

Source: Developed for the study

Factor 3 – ICT Diffusion Innovation (ICT): This factor covers a manager's experiences on management ICT diffusion innovation in the organisations. 13 items scale is applied, developed by Peansupap and Walker (2005). Applying factor loading at 0.5 (Field, 2009) no item is excluded (Table 5.11).

Table 5. 12: Factor loading and Cronbach's Alpha for corporate leadership

		Factor	Cronbach's
Variables	Factor and Related Item	Loading	Alpha
CL01	He/she makes me feel good to be around him/her.	.720	.973
CL02	I have complete faith in him/her.	.738	
CL04	He/she expresses with a few simple words what I could and should do.	.612	
CL05	He/she provides appealing images about what I can do.	.730	
CL06	He/she helps me find meaning in my work.	.762	
CL07	He/she enables me to think about old problems in new ways.	.720	
CL08	He/she provides me with new ways of looking at puzzling things.	.748	
CL10	He/she helps me to develop myself.	.711	
CL11	He/she lets me know how he/she thinks I am doing.	.697	
CL12	He/she gives personal attention to others who seem rejected.	.738	
CL16	He/she is very transparent and consistent with his/her decision.	.698	
CL17	He/she is always able to deliver his/her promise	.683	
CL18	He/she gives me freedom to accomplish my work successfully.	.598	
CL19	He/she is willing to meet the staff if they need clarification on certain issues.	.604	

Source: Developed for the study

Factor 4 – Corporate Leadership (CL): This factor encompasses managers' perceptions on organisational corporate leadership. 14 items scale applied by Bass and Avolio, (1994) cited

in Northouse (2004), is applied and provides information about managers' attachment. Applying factor loading at 0.5, no item is excluded and the factor is loaded with one factor (Field, 2009) (Table 5.12).

Table 5. 13: Factor loading and Cronbach's Alpha for mission achievement

Variables	Factor and Related Item	Factor Loading	Cronbach's Alpha
MA01	Our mission is used to monitor performance	.667	.975
MA02	Our mission is used to make decisions	.625	
MA03	I understand how my job helps to achieve our mission	.660	
MA04	Our mission statement helps me to understand how my organisation sets priorities	.718	
MA05	Strategy is important to our mission	.666	
MA06	Our strategy is achievable	.619	
MA09	Our mission is the driving force for this organisation	.695	
MA15	We consistently meet the criteria for performance established in our values statement	.658	
MA16	Our leaders keep reminding us and continue to talk about our mission.	.676	
MA19	Our organisation uses the right media to communicate the organisation's mission.	.617	
MA20	Our mission is very clearly stated and everybody knows how to achieve it.	.658	

Source: Developed for the study

Factor 5 – Mission Achievement (MA): This factor encompasses managers' perceptions on organisational mission achievement. 11 item scales, developed Blackmon (2008), is applied measuring the mission achievement. All items are included applying factor loading at 0.5. (Field, 2009) (Table 5.13).

5.5 Confirmatory Factor Analysis (CFA) and Measurement Model

As discussed in Chapter 4, structural equation modelling (SEM) was performed to test the measurement model and structural model. Towards that end, the two-stage approach, recommended by Anderson and Gerbing (1988), was adopted. Firstly, confirmatory factor analysis was performed using AMOS 18.0 to estimate relationships with more than one causal link between the observed variables (items) and the underlying theoretical constructs. Secondly, the structural models (second stage) specified the causal or path relationships between the underlying exogenous and endogenous constructs.

Prior to predicting causal relationships among the constructs, it is important to develop an acceptable measurement model. In this approach, confirmatory factor analyses (CFA) were

employed to examine the validity of the constructs that is measurement model assessment and examine the structural model (relationship between the constructs). The purpose of CFA is to test whether the theoretically imposed structure of the underlying constructs exists in the observed data (Anderson and Gerbing, 1982). This analysis allows us to evaluate whether the specific construct indicators converge or share a high proportion of variance in common, which is called convergent validity (Hair *et al.*, 2010). Furthermore, CFA is also used to examine the discriminant validity and nomological validity of the constructs. The details of the validity and reliability tests are discussed in the next section of this chapter.

The estimation method used, maximum likelihood (ML) by CFA, is an accurate technique in SEM programmes, when the multivariate normality criterion is met (Fabrigar *et al.*, 1999; Hair *et al.*, 2010). However, if the assumption of multivariate normality has been violated, Fabrigar *et al.* (1999) recommend one of the principal factor methods called principal axis factors (PAF). In normal cases, ML has proven fairly robust to violations of the normality assumption (Hair *et al.*, 2010). In addition, many scholars (Anderson and Gerbing, 1988; Bentler and Chou, 1987; Hair *et al.*, 2010) indicate having at least five observations for each variable to meet the criterion. In general, both ML and PAF are recommended because they give the best results, but the data should be normally-distributed or significantly non-normal.

In order to evaluate the fit of each model, other multiple fit indicators are used, such as CFI, GFI, Root Mean Square Error of Approximation (RMSEA) and standardised RMR (SRMR). These are used to check the validity of the measurement model because chi-square is sensitive to large sample size and standard error due to ML application (Bentler and Chou, 1987). In this study, covariance matrices were used as input in conducting SEM analysis based on interpretive and statistical issues as recommended by Hair *et al.*, (2010).

- (a) *Interpretation* in terms of standardised results, a correlation matrix holds no advantage over a covariance matrix because it is simple to produce these results by requesting a completely standardised solution.
- (b) *Statistical impact* in standard error computations, the use of correlations can lead to errors.

5.5.1 The Measurement Model

71 items were used for CFA analysis: CCM (14 items), CC (16 items), ICT (13 items), CL (14 items), MA (11 items) and FP (3 items). The first attempt with 71 items shows the model was not a good fit. All the values were unacceptable for determining the overall model fit. The CMIN/DF is 3.259; RMSEA value is 0.098; goodness of fit index (GFI) value is 0.534; adjusted goodness of fit index (AGFI) value is 0.506; Tucker-Lewis Index (TLI) value is 0.772, and comparative fix index (CFI) is 0.777.

Considering the standardised regression weight, no potential problem was found and the entire item loading of more than 0.5 is acceptable. All the loadings are above the threshold range from 0.73 to 0.93, and the *t*-values range from 12.51 to 19.18 using path estimate. The standardised regression weight item is acceptable.

There is no way to exclude an item based solely on loading value, since the loading is acceptable. Therefore, standardised residual covariance is examined in order to improve the model fit. According to Hair *et al.*, (2010), residuals refer to "the individual differences between observed covariance terms and the fitted covariance terms, and the standardised residuals are the raw residuals divided by the standard error of the residual" (p.769). The specified measurement model does not precisely re-create the observed covariance between those two items identified from the residual values. According to Hair *et al.*, (2010), the rule of thumb for standardised residual less than 2.5 does not show any problem, the range between 2.5 to 4.0 deserves some attention and if greater than 4.0 indicates an unacceptable degree of error. Considering the standardised residual covariance value of 3.403 (CL18 & CL19), 2.722 (CCM29 & CCM03), 3.200 (CCM29 & ICT18), 3.276 (CCM03 & ICT18) and value 2.583 (CCM03 & ICT08) this must be investigated further, since these values are over 2.5. Values over 2.5 might be a reason for model misspecification.

To gain a more detailed idea about these, relationship modification index value is also examined. In this process, modification indexes are calculated for every possible relationship that is not estimated in the model. It shows how much the overall model χ^2 would be reduced by freeing that single path (Hair *et al.*, 2010, p.712). Therefore, to improve the model fit the corresponding path for the modification indices' value of approximately 4.0 or greater should be freeing. The results of modification indices demonstrates the chi-square value can be

decreased and improve the model fit by omitting some items. The following item is removed in order to decrease chi-square and obtain a better model fit.

Table 5. 14: Modification indices results

Corporate	Corporate	ICT Diffusion	Corporate	Mission
Communication	Culture	Innovation	Leadership	Achievement
Management				
e33 (CCM03)	e1 (CC01)	e17 (ICT03)	e51 (CL01)	e67 (MA02)
e35 (CCM05)	e3 (CC02)	e19 (ICT04)	e54 (CL04)	e69 (MA04)
e38 (CCM14)	e6 (CC04)	e20 (ICT05)	e55 (CL05)	e74 (MA09)
e39 (CCM16)	e7 (CC06)	e22 (ICT08)	e56 (CL06)	e81 (MA16)
e40 (CCM18)	e8 (CC07)	e23 (ICT10)	e57 (CL07)	e82 (MA19)
e42 (CCM24)	e9 (CC08)	e24 (ICT12)	e58 (CL08)	e83 (MA20)
e43 (CCM26)	e10 (CC09)	e25 (ICT13)	e65 (CL11)	
e45 (CCM28)	e11 (CC11)	e28 (ICT16)	e94 (CL16)	
e48 (CCM29)	e14 (CC13)	e91 (ICT20)	e96 (CL18)	
	e15 (CC14)			
	e89 (CC18)			

Source: Developed for the study

The deleted item is theoretically valid. However, from the statistical test (EFA and CFA), the item score is below cutting of point. There are two schools of thought to justify these issues. First, the researcher can keep the item because theoretically is valid and sound while the second opinion suggests deleting the item with low score to get a fit model. In this thesis, the second choice has been followed in order to get a fit model in the next stage of analysis.

Even though major changes occurred in the measurement model, this did not affect the meaning of the construct. The item deletion process also took into consideration the theoretical concept for each construct. For example, corporate culture is still valid in representing the construct, because the remaining items are an important predictor of CCM and are a good fit with the model.

In the next stage, the revised confirmatory factor analysis model should be completed to fit the model. After the deletion of all the above items, the model received a significant fit to the data. At the end of the analysis, only 27 items were satisfactory for the model fit. Consequently, acceptable fit of the measurement model could be judged. Chi-square (χ^2) = 535.96, df = 309, P-value = .000, CFI = 0.96, TLI = 0.96, GFI=0.86, AGFI= 0.83, NFI= 0.92 and RMSEA=0.058. To indicate the overall fit, the normed chi-square (χ^2 /df) in conjunction

with other measures was used. These are used to evaluate the appropriateness of the research model and the most popular parsimonious fit index (Hair *et al.*, 1995). However, it is sensitive to the sample size since chi-square is a major component in this measure. Basically, the acceptable range for the ratio of the chi square to the degrees of freedom is 1 to 5 and the result of 1.57 in this study fits into that range (Marsh and Hovecar, 1985). In addition, one of the most informative criteria in SEM analysis is RMSEA because it takes into account the error of approximation in the population (Byrne, 1989). Values of less than 0.05 indicate a good fit, values ranging from 0.08 to 0.10 indicate mediocre fit and values of greater than 0.10 indicate a poor fit (Diamantopolous and Siguaw, 2000; Hair *et al.*, 2006). Furthermore, Doll *et al.*, (1994) also suggest for GFI and AGFI values of .80 to .89 are indicated of reasonable fit and if less than 0.8 they should be rejected (Tanaka and Huba, 1985). This study meets all the above criteria; thus, the model contains these requirements and demonstrates a satisfactory fit. The summary of the CFA test results is shown in Table 5.15.

Table 5. 15: Results of the confirmatory factor analysis of the main survey

Constructs	Items	SMC	Loadings	Alpha
Corporate	We are responsible to produce publications for the			
Communication	company (e.g. newsletter, company profile and corporate			
Management	brochures)(CCM11)	0.639	0.800	0.936
	We organise Corporate Social Responsibilities (e.g.			
	sponsorship, charities and education) programmes for			
	stakeholders' engagement and participation. (CCM13)	0.728	0.853	
	We organise media programmes (e.g. media night or golf			
	with media) to build a relationship with the media.			
	(CCM19)	0.852	0.923	
	We provide information and manage relationships with			
	the investors through various programmes (e.g. investor			
	relations programme and annual general	0.869	0.932	
	meeting)(CCM27)			
	We help the company create open communication			
	within the organisation during a particular crisis (for	0.650	0.012	
	example, sales drop, economic down turn or merger and	0.658	0.812	
<u> </u>	acquisition)(CCM30)			
Corporate	The glue that holds my organisation together is loyalty			
Culture	and tradition. Commitment to this firm runs high.	0.626	0.702	0.027
	(CC03)	0.626	0.792	0.927
	The head of my organisation is generally considered to	0.601	0.775	
	be coordinator, an organiser, or an administrator (CC12)	0.601	0.775	
	My organisation is very production oriented. A major			
	concern is with getting the job done, without much	0.730	0.854	
	personal involvement.(CC16) The head of my organisation is generally considered to	0.730	0.854	
	be a producer, a technician, or a hard-driver. (CC17)	0.818	0.904	
	My organisation emphasises competitive actions and	0.010	0.904	
	achievement. Measurable goals are important. (CC19)	0.827	0.909	
ICT Diffusion	Organisational technical support is sufficient (e.g., help	0.027	0.303	
Innovation	desk, and getting software operational) to allow me to			
imovation	uesk, and getting software operationar) to allow the to		1	

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	learn about and apply ICT tools that I am expected to use	0.700	0.004	0.004
	here. (ICT07)	0.799	0.894	0.901
	My immediate supervisor in my organisation is open to			
	suggestions on improving the way that ICT tools that I			
	am expected to use here are used (ICT15)	0.669	0.818	
	The management is very supportive and understand that			
	ICT can help business become more efficient and make			
	our work better. (ICT18)	0.666	0.817	
	Our organisation provides intangible rewards			
	(recognition, thanks or public praise) to those who share			
	ideas and experience about ICT tools that I am expected			
	to use here (ICT21)	0.664	0.815	
Corporate	I have complete faith in him/her. (CL02)	0.776	0.881	0.913
Leadership	He/she helps me to develop myself. (CL10)	0.834	0.913	
	He/she gives personal attention to others who seem			
	rejected. (CL12)	0.653	0.808	
	He/she is always able to deliver his/her promise. (CL17)	0.590	0.768	
	He/she is willing to meet the staff if they need			
	clarification on certain issues. (CL19)	0.572	0.756	
Mission	Our mission is used to monitor performance (MA01)	0.759	0.871	0.954
Achievement	I understand how my job helps to achieve our mission			
	(MA03)	0.814	0.902	
	Strategy is important to our mission (MA05)	0.882	0.939	
	Our strategy is achievable (MA06)	0.868	0.932	
	We consistently meet the criteria for performance			
	established in our values statement (MA15)	0.714	0.845	
Financial	Return on Asset	0.924	0.988	0.843
Performance	Return on Investment	1.026	0.984	
	Return on Equity	0.794	0.483	
	· · · · · · · · · · · · · · · · · · ·			

Source: Developed for the study

Specification searches – According to Hair et al., (2006) a "specification search is an empirical trial-and-error approach that uses model diagnostics to suggest changes in the model. In fact, when we make changes based on diagnostic indicators, we are performing a specification search". However, it is not a recommended approach (Hair et al., 2006). In this stage, the measurement is evaluated in two steps. Firstly, the unidimensionality is assessed for each factor (see Section 5.5.3), and then the reliability and validity of each construct is calculated (see Section 5.5.4 and 5.5.6).

5.5.2 Common Method Bias Test

The common method bias refers to the degree to which correlations are altered (inflated) due to a method's effect (Meade *et al.*, 2007, p.1). As outlined by Podsakoff *et al.*, (1984), Harman's (1967) one-factor test is employed to resolve the presence of common method variance bias among the study variables. Principle component analyses with varimax rotation

apply to all the items. In this technique, if a single common factor emerges for more than 50% of the covariation from the factor analysis or one general factor accounts a common method bias is indicated. The result of this study has shown there is no single factor in the factor structure. Therefore, a common method bias concern does not appear in the present study.

5.5.3 Assessing the Unidimensionality

Unidimensionality is tested on the entire construct in the proposed model. It exists when there is one latent trait underlying the data (Hattie, 1985). The overall fit of the model is used in CFA as the necessary and sufficient condition to inspect a unidimensionality of a set of measurement items (Kumar and Dillon, 1987; Steenkamp and Van Trijp, 1991). Therefore, in this study, the unidimensionality of scales was evaluated first in conducting the CFA for the measurement model. The group was hypothesised to be a five-dimensional model (corporate culture, ICT diffusion innovation, corporate leadership, corporate communication management and mission achievement).

After running CFA, as presented in Table 5.15, unidimensionality is clear with each item loading onto the underlying construct. Each of them was found to load on only one corresponding dimension of well-fitting models (Hattie, 1985; Netemeyer *et al.*, 2003). Factor loadings in this study show all items have significant factor loadings with *t*-values exceeding 1.96 (t>1.96; p>0.05). An inspection also indicates all the constructs have high alpha coefficients greater than 0.7. In addition, some items show SMC less than 0.5, indicating the construct explains less than half the variance in the item.

5.5.4 Convergent Validity

Convergent validity refers to the degree to which measures of two different constructs are appropriately consistent with one another (Houston, 2004). Convergent validity is assessed based on the factor loadings where high loadings on a factor would indicate that they converge on a common point, the latent construct (Hair *et al.*, 2010, p.709). In this study, convergent validity is achieved because each indicator to the construct is significant and substantial (standardised loading estimate > 0.7) (Hair *et al.*, 2010). This is, furthermore, another way of measuring convergent validity through composite reliabilities of each of the constructs and calculation of average variance extracted (AVE) (Hair *et al.*, 2010). The results

(see Table 5.16) indicate high levels of composite reliability and AVE for all latent constructs. In addition, all t values are significant (p = 0.5 and the AVE is greater than 0.50), which means convergent validity is established.

Table 5. 16: Composite reliability and variance extracted

	1		Variance	Composite
		Loading	Extracted	Reliability
Corporate	CCM11	0.800		
Communication	CCM13	0.853	0.75	0.94
Management	CCM19	0.923		
	CCM27	0.932		
	CCM30	0.812		
Corporate Culture	CC03	0.792		
	CC12	0.775	0.72	0.90
	CC16	0.854		
	CC17	0.904		
	CC19	0.909		
ICT Diffusion	ICT07	0.894		
Innovation	ICT15	0.818	0.70	0.90
	ICT18	0.817		
	ICT21	0.815		
Corporate	CL02	0.881		
Leadership	CL10	0.913	0.68	0.91
	CL12	0.808		
	CL17	0.768		
	CL19	0.756		
Mission	MA01	0.871		
Achievement	MA03	0.902	0.81	0.93
	MA05	0.939		
	MA06	0.932		
	MA15	0.845		
Financial	ROA	0.961		
Performance	ROI	0.785	0.78	0.91
	ROE	0.891		

Source: Developed for the current study

5.5.5 Discriminant Validity

Table 5. 17: Discriminant validity

Variables	CCM	CC	ICT	CL	MA	FP
CCM	0.870					
CC	0.810	0.850				
ICT	0.629	0.627	0.840			
CL	0.718	0.779	0.590	0.830		
MA	0.720	0.797	0.671	0.824	0.900	
FP	0.175	0.053	0.050	0.074	0.092	0.880

Note: Average variance was extracted from the squared multiple correlation estimates as formula given by (Fornell and Larcker, 1981)

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion Innovation, CL = Corporate Leadership, MA = Mission Achievement, FP = Financial Performance

Source: Developed for the study

CFA discriminant validity assesses the degree to which measures of different concepts are distinct (Bagozzi, 1994, p.20). It is assessed by using average variance extracted (Fornell and Larcker, 1981; Hair *et al.*, 2010). Discriminant validity can be calculated by comparing the squared correlation between two constructs with the variance extracted between those two constructs. Results of AVE should be greater than the squared correlation estimates (Fornell and Larcker, 1981; Hair *et al.*, 2010, p.710). Based on this approach, this study found discriminant validity in all latent constructs. The results in Table 5.17 show that values of all AVE are greater than relevant squared correlation estimates, thereby discriminant validity is confirmed.

5.5.6 Nomological Validity

According to Houston (2004) nomological validity refers to "the degree to which the measure of the construct relates to measures of other constructs in a manner that is consistent with theory" (p.157). It can be assessed based on a correlation matrix (Hair et al., 2010). The results provided in Table 5.18 shows the constructs were positively related to one another.

Table 5. 18: Constructs correlation matrix (standardised)

	CCM	CC	ICT	CL	MA
CCM	1.000	.754	.599	.668	.691
CC	.754	1.000	.579	.729	.762
ICT	.599	.579	1.000	.557	.637
\mathbf{CL}	.668	.729	.557	1.000	.775
MA	.691	.762	.637	.775	1.000

Note: Values below the diagonal are correlation estimates. Values above the diagonal are squared correlations.

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion Innovation, CL = Corporate Leadership, MA = Mission Achievement

Source: Developed for the study

Based on the construct validity results, assessment shows statistically and theoretically valid constructs for the measurement model, encompassing convergent, discriminant and nomological validity. In consequence, the robust underlying latent variables are established for a stage of structural equation model testing.

5.6 Structural Model Evaluation

The purpose of the structural model is to identify the direct or indirect influence of latent constructs to other latent constructs in the model (Byrne, 1989). It is performed after the measurement model is validated and achieves a satisfactory fit (Anderson and Gerbing, 1988). Therefore, the theoretical model in this study is specified to test the 10 causal paths, which are represented in the hypotheses (H1a, H1b, H1c, H2a, H2b, H3a, H3b, H3c, H4a, and H4b). The significant parameter estimates results show 7 out of 10 hypotheses of standardised estimate are statistically significant, and in the hypothesised direction. The hypotheses of this thesis are discussed in detail in the following section.

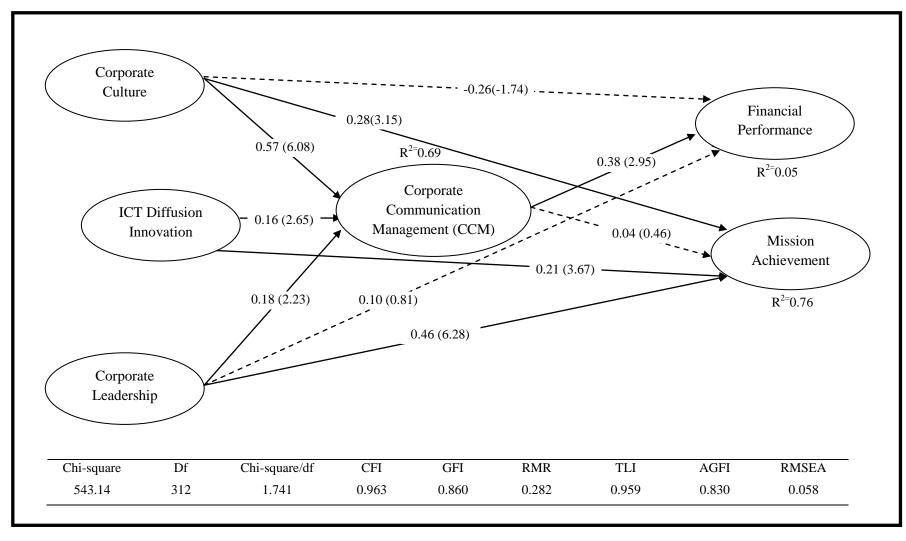
Chapter 3 has explained the proposed theoretical model, in which the underlying constructs are divided into two groups, including exogenous constructs (corporate culture, ICT diffusion innovation and corporate leadership) and endogenous constructs (CCM, financial performance and mission achievement). The coefficient parameter estimates in a structure are examined along with the goodness-of-fit indices which measure the fit of data on a hypothesised structural model. If the results show the model does not fit, it requires the model to be respecified until the acceptable statistical fit is achieved, and indicates a theoretically

significant representation of the observed data (Anderson and Gerbing, 1988; Hair *et al.*, 2010; Tabachnick and Fidell, 2007).

The hypothesised model testing shows the results as presented in Table 5.20 that hypotheses H1a, H1c, H2a, H2b, H3a, H3c and H4a are supported. These hypotheses demonstrating the standardised estimate are all significant ($\gamma = 0.57$, 0.28, 0.16, 0.19, 0.18, 0.46 and 0.38) respectively. However, hypotheses H1b, H3b and H4b are rejected since they are not statistically significant ($\gamma = -0.26$, 0.18 and 0.04 respectively).

The model is defined by 27 items that identify the six factors. For the model testing, the covariance among the variable is used. The goodness-of-fit indices illustrate that this model fits the data satisfactorily. Figure 6.5 shows the results for each hypothesised path and goodness-of-fit statistics. It indicates the overall structural model analysed is accepted. CFI value is 0.96; Tucker-Lewis index is 0.96 and RMSEA value 0.058 is accepted within the thresholds for indicating a good fit (Hair *et al.*, 2010). As a complement to these findings, the chi-square ratio index (1.74) is found to match the requirements set by academicians (Carmines and McIver, 1981; Marsh and Hovecar, 1985). Additionally, most path coefficients are significant (P <.05).

Among the independent constructs consisting of corporate culture, ICT diffusion innovation and corporate leadership, the causal relationships are positive and statistically significant at the 0.05 level. The results indicate strong empirical evidence for H1a, H1b, H1c, H2a, H2b, H3a and H3c. Furthermore, regarding the consequences, the path coefficients between CCM to financial performance are positive and significant at the 0.05 level. However, path coefficients between CCM to mission achievement are insignificant. Corporate culture has the strongest effect on CCM (γ = .57, p < 0.05) compared to other antecedents construct. CCM construct explains 69% variance of the model. Investigating the consequences, in sum, CCM has the strongest effect on financial performance (γ = .38, p < 0.05) and the effects on mission achievement are not significant (β = .04, p > 0.05). The derived model explains approximately 5% of the variance in perceived financial performance and 76% in the mission achievement construct.



^{*} t values greater than 1.282 were significant at 0.90 confidence level and t values greater than 1.96 were significant at 0.95 Solid lines indicate significant relationships, and dotted lined indicate non-significant relationships.

Source: Developed for the study

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Table 5. 19: Regression weights

Variable	Estimate	S.E.	C.R.	P
Corporate Communication Management ← Corporate Culture	.572	.082	6.077	***
Corporate Communication Management ICT Diffusion Innovation	.163	.046	2.650	.008
Corporate Communication Management Corporate Leadership	.176	.067	2.233	.026
Financial Performance	.380	3.090	2.951	.003
Mission Achievement ← Corporate Communication Management	.035	.082	.458	.647
Financial Performance ← Corporate Culture	262	3.553	-1.741	.082
Mission Achievement ← Corporate Culture	.283	.097	3.146	.002
Mission Achievement ← ICT Diffusion Innovation	.167	.045	3.667	***
Financial Performance ← Corporate Leadership	.010	2.446	.081	.936
Mission Achievement ← Corporate Leadership	.463	.068	6.278	***

Note: S.E. = standard error, C.R. = critical ratio, P= significance value

Source: Developed for the study

Table 5. 20: Results of testing the hypotheses

Hypotheses	Path	t-value	Test results
	estimates		
H1a: Corporate culture will have a positive effect	0.57	6.08	Accepted
on corporate communication management			_
(CCM)			
H1b: Corporate culture is positively correlated	-0.26	-1.74	Rejected
with financial performance			
H1c: Corporate culture is positively correlated	0.28	3.15	Accepted
with mission achievement.			
H2a: ICT diffusion innovation will have a	0.16	2.65	Accepted
positive effect on Corporate Communication			
Management (CCM)			
H2b: ICT diffusion innovation has an influence	0.21	3.67	Accepted
on mission achievement			
H3a: Transformational corporate leadership will	0.18	2.23	Accepted
have a positive effect on corporate			
communication management (CCM)			
H3b: Transformational corporate leadership is a	0.10	0.81	Rejected
positively correlated with financial performance			
H3c: Transformational corporate leadership is	0.46	6.28	Accepted
positively correlated with mission achievement			
H4a: Corporate communication management	0.38	2.95	Accepted
(CCM) will have a positive effect on financial			
performance			
H4b: Corporate communication management	0.04	0.46	Rejected
(CCM) will have a positive effect on mission			
achievement			

Source: Developed for the current study

5.7 Results of Testing the Hypotheses

In total, 10 hypotheses are tested (see Table 5.20). The implications of these results are further discussed in Chapter 6.

Corporate culture and corporate communication management (CCM)

As shown earlier, hypothesis H1a explains the relationship between the corporate culture and CCM. As outlined in Table 5.20, the hypothesised relationship is found to be significant ($\gamma = 0.57$, *t*-value = 6.08). Thus, this hypothesis is supported.

Corporate culture and financial performance

Hypothesis (H1b) explains the relationship between corporate culture and financial performance are rejected. Table 5.20 shows that the hypotheses are statistically insignificant. The path from corporate culture to financial performance (H1b) is insignificant ($\gamma = -0.26$, t-value = -1.74).

Corporate culture and mission achievement

Hypothesis H1c represents the relationship between the corporate culture and mission achievement. According to the results presented in Table 5.20, it is found that this hypothesis is statistically significant ($\gamma = 0.28$, *t*-value = 3.15), and thus accepted.

ICT diffusion innovation and corporate communication management (CCM)

The hypothesis representing the relationship between ICT diffusion innovation and CCM, H2a is supported, as the parameter estimates are significant ($\gamma = 0.16$, *t*-value = 2.65) (see Table 5.20).

ICT diffusion innovation and mission achievement

The hypothesis representing the relationship between ICT diffusion innovation and mission achievement H2b is supported, as the parameter estimates are significant ($\gamma = 0.21$, *t*-value = 3.67) (see Table 5.20).

Corporate leadership and corporate communication management (CCM)

Hypothesis H3a is the relationship between corporate leadership and CCM. As hypothesised, corporate leadership is found to be positively related to CCM. Results show a significant path ($\gamma = 0.18$, *t*-value = 2.23), and thereby H3a is supported (see Table 5.20).

Corporate leadership and financial performance

The hypothesis represents the relationship between corporate leadership and financial performance (H3b). This hypothesised relationship is found to be non-significant ($\gamma = 0.10$, t-value = 0.81), rejecting this hypothesis.

Corporate leadership and mission achievement

As shown in Table 5.20, hypothesis H3c explains the relationships between corporate leadership and the mission achievement is supported as the hypothesised relationship is found to be significant ($\gamma = 0.46$, t-value = 6.28).

Corporate communication management (CCM) and financial performance

The hypothesis (H4a) explains the relationship between CCM and financial. Results in Table 5.20 indicate that hypothesis H4a is statistically significant. The path from CCM to financial performance is significant ($\gamma = 0.38$, t value = 2.95). Thus, this hypothesis is supported.

Corporate communication management (CCM) and mission achievement

Hypothesis (H4b) explains the relationship between CCM and mission achievement. According to Table 5.20, the hypothesis explaining the relationship CCM and mission achievement (H4b) is rejected because it is not found to be significant in the hypothesised direction ($\gamma = 0.04$, t-value = 0.46).

5.8 Summary

No missing data was identified, since the technical aspect of the online survey was enabled. Normality of the responses showing the skewness and kurtosis, also, was presented. Even though the literature and the qualitative findings are used to derive the items for all constructs, some of the items were deleted in the process of data cleaning. Then, the respondents' demographic characteristics were described. The reliability and EFA test indicated that no item needed to be deleted since all the items loaded in the right factor. SEM analysis was employed in the second part of the analysis that involved the test of measurement model and the structural model. CFA was used in the first stage to assess measurement model fit. The result shows that the overall goodness-of-fit indices were not met. Following this, some of the items were deleted based on modification indices, to ensure the fit model. Then, the reliability and validity test of Cronbach's alpha, composite reliability and average variance extraction took place for each construct. The results demonstrated a high level of reliability for all constructs. Moreover, it was confirmed by a further test on convergent, discriminant and nomological for all constructs.

The assessment of the structural model was undertaken at the second stage of SEM analysis. The results showed a good fit of the model, pathways were significant while another three were non-significant. The structural model demonstrated that three variables (corporate culture, ICT diffusion innovation and corporate leadership) had a different level of impact on the focal construct, and CCM had an impact on financial performance, but not on mission achievement.

CHAPTER 6: RESULTS AND DISCUSSION

6.1 Introduction

The detailed discussion on the measurement model validation and the results are the focus of this chapter. In addition, the summary of the research hypotheses and their significant evaluation are discussed. Subsequently, the study implications are also elaborated. This chapter further discusses the findings in terms of the contribution to communication theory and their relevance to corporate communication managers. The outlines of the limitations and recommendations of the current study are given, and finally yet importantly, implications for future research are explored.

6.2 Overview of Study

The main purpose of this study was to investigate the antecedents of CCM, which involved the most significance factors that influence CCM and its impact on organisational performance within the public listed companies' context. The importance of this topic to corporate organisation can be seen from the contribution of CCM to organisational performance and the consequent ability to increase competitive advantage (Argenti, 2000).

The conceptual model hypothsised a strong relationship between communication and organisational determinants such as corporate culture (Ang, 1990; Brown and Starkey, 1994; Sriramesh, *et al.*, 1996), ICT diffusion innovation (Anumba and Duke, 1997; Deller *et al.*, 1999; Harris and Sieder, 2001; Papastathopoulou *et al.*, 2007; Tam, 1999) and corporate leadership (Hetland and Sandal, 2003; Kouzes and Posner, 1987; Oakland, 1993; Oh *et al.*, 1991; Snyder and Morris, 1984; Snyder and Morris 1984; Takala, 1997).

Additionally, the literature review also found that communication has a strong relationship to organisational performance (Chang and Abu Hassan, 2006; Forman and Argenti, 2005; Gudykunst and Nishida, 2001; Lull *et al.*, 1955; Pincus, 1986). Therefore, the CCM is assumed to increase financial performance (Campbell, 1993; Pincus, 1986) and help an organisation attain its mission (Blackmon, 2008; Niven, 2003; Owen *et al.*, 2001). However, based on the literature review, the empirical research carried out in this area is limited. Many

studies have focused on assessing general communication effectiveness, and the effect of specific communication behaviour (Chang and Abu Hassan, 2006; Gudykunst and Nishida, 2001; Lull *et al.*, 1955; Pincus, 1986).

Multi-method research was adopted to investigate the research problem (Creswell, 2003; Deshpande, 1983). A semi-structured interview was used. The respondents for the interviews included 12 corporate communication practitioners and consultants. To analyse the texts, QSR Nvivo Version 9.0 qualitative analysis software texts were employed. At this stage, the qualitative findings confirmed the dimensionalities of CCM, and revealed 29 new measurement items for the constructs in the proposed model, adding to the existing pool of items extracted from the literature review.

The process of refinement of the measurement items was conducted for the items generated from both the review of the literature and by having the model assessed by practitioners and academicians. From this, a number of items were dropped and some of the sentences were restructured. Then, the developed scale was tested using reliability test and statistical data reduction techniques, that is item to total correlation in the pilot test. After the process of refinement at the pilot study stage, the online survey and drop and collect method were employed to gather data from the respondents. Specifically, public relations and corporate communication managers were used as a sample to assess the measurement and structural model in the study.

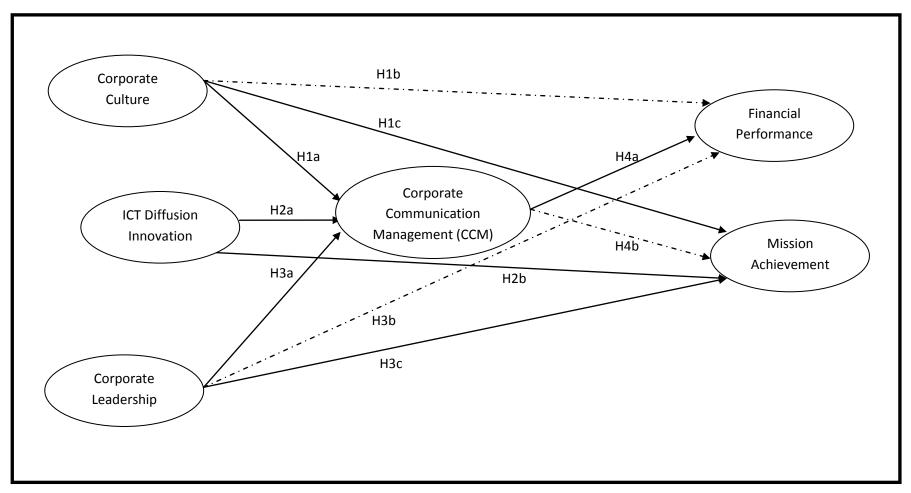
This study also used secondary data in order to measure the financial performance of the company. Secondary data, considered as 'real' data, were collected from less obtrusive methods (for example, the financial reports of public listed companies found in DataStream Thomson Reuters). One year (2011) of financial data of ROA, ROI and ROE were used in this research.

AMOS version 18.0 was used to analyse the quantitative data, and the results of the study show CCM is a unidimensional construct. In addition, the test of reliability, convergent, discriminant and nomological validity for all constructs also showed an accepted level of degree. The developed model was then tested using a sample of public relations and corporate communication managers from 223 companies. The test results strongly supported

the model. The results confirmed significant pathways between CCM and other constructs, indicating both the measurement and structural model have satisfactory fit indices. Data showed a significant fit in the confirmatory factor analysis (CFA). Based on the principles suggested, the chi-square (χ^2) = 535.96, df = 309, *P*-value = 0.000, CFI =0.96, TLI = 0.96, GFI = 0.86, AGFI = 0.83, NFI = 0.92 and RMSEA = 0.058 were in the range of an accepted level (Anderson and Gerbing, 1988; Hair *et al.*, 2010; Tabachnick and Fidell, 2001).

Finally, the structural model (path analysis) was tested and showed the range to be an accepted level (Anderson and Gerbing, 1988; Hair *et al.*, 2010; Tabachnick and Fidell, 2001) and satisfactory fit indices with chi-square (χ^2) = 543.14, df = 312, *P*-value = 0.000, CFI =0.96, TLI = 0.96, GFI = 0.86, AGFI = 0.83, NFI = 0.92 and RMSEA = 0.059. The results presented in Table 5.20 tested the hypothesised model, indicating hypotheses H1a, H1c, H2a, H2b, H3a, H3c and H4a are supported. The tables show that the standardised estimates for these hypotheses were all significant (γ = 0.57, 0.28, 0.16, 0.19, 0.18, 0.46 and 0.38 respectively). However, hypotheses H1b, H3b and H4b were not statistically significant, and they were rejected (γ = -0.26, 0.18 and 0.04 respectively).

Figure 6. 1: Hypothesis testing model of Corporate Communication Management (CCM)



Source: Developed for the study

6.3 Antecedents of Corporate Communication Management

In this study, there are several antecedents for CCM which were confirmed in the quantitative data that will assist the corporate communication managers of public listed companies in understanding the management role such as corporate culture, ICT diffusion innovation and corporate leadership. In the structural model, those antecedents were represented as latent exogenous constructs. Furthermore, those constructs were estimated and showed good fit indices in a measurement model. Although some items were culled in the process of scale refinement, the relevant items loaded to the underlying constructs as predicted (Steenkamp and Van Trijp, 1991).

Corporate Culture

Research supports the idea (H1a) that corporate culture is a key driver of CCM. This is confirmed by Hall's (1959) statement 'culture is communication, and communication is culture' (p.186) studies have found corporate culture to be an antecedent to some communication variables in communication literature such as organisational communication (Hofstede, 1980). Furthermore, Cornelissen and Elving (2003) claimed that corporate culture is a direct antecedent of behavioural and communication manifestation within the corporate identity mix. However, this postulation has not been tested in CCM. To date, the current study on the relationship between corporate culture and CCM is the first to empirically test this in the field of corporate communication. The result shows the hypothesised relationships in this study are statistically significant. Therefore, this study concludes that corporate culture remains a functional instrument in constructing a better CCM. Its role can help large organisations, public listed companies. Thus, companies must allocate some amount of budget improving a positive culture of companies in conjunction with image and reputation building, so that the stakeholders become confident and continue to support the companies.

The direct effect of corporate culture on financial performance (H1b) appears to make sense. Nevertheless, few studies have been completed to link cultural characteristics to some measure of corporate financial performance (Gordon and DiTomaso, 1993). The quantitative results confirmed corporate culture is a direct antecedent of financial performance as

suggested by many (for example Clement, 1994; Kotter and Haskett, 1992; Rashid *et al.*, 2003; Sheridan 1992; Van der Post *et al.*, 1998). This relationship has a direct but negative effect on financial performance which is not supported and not consistent with previous studies in corporate culture that found positive relations. In other words, hypothesis H1b was rejected. This is a rather surprising result, and it is mainly related to contextual issues. There are certain aspects of corporate culture which may improve the performance in one context, but may not be effective or are dysfunctional in another context (Chow *et al.*, 1996; Lincoln and Kalleberg, 1990; Steers, 1989). Furthermore, Denison (1984) also found a variety of characteristics of business were adverse effects on performance. Since the data was collected from 12 different industries, the results were affected. This research, however, is the first to find negative relationships between corporate cultures to financial performance. The findings also supported Calori and Sarnin (1991) who found there is no consensus on the relationship between corporate culture and economic performance. Therefore, this finding emphasises the need for more research to confirm the effects of corporate culture on the financial performance.

The study also exhibits support for the hypothesised effects of corporate culture on mission achievement (H1c). Despite little literature supporting the relationship between corporate culture and mission achievement, the results show that both variables have a positive relationship. It has support from other research that found a strong impact of corporate culture to other non financial performance variables, that is commitment (Rashid *et al.*, 2003) and job performance (Abu Bakar *et al.*, 2008). The performance literature also showed that corporate culture affects the performance derived from companies' vision and mission (Chow *et al.*, 2008). According to Ouchi (1983), with a clear corporate philosophy, an organisation enables subordinates to co-ordinate their activities to achieve common purposes which are stated in the mission statement (Ouchi, 1983). This finding has supported the importance of corporate culture as a main determinant of the mission achievement in the public listed companies.

ICT Diffusion Innovation

The notion that ICT diffusion innovation is a predictor to CCM (H2a) is supported in this study. This finding is consistent with the Argenti (2006) argument that technology has an

effect on the development of corporate communication, especially when communicating to their stakeholders. For example, ICT diffusion innovation provides improvement in communication activities, especially with customers (Papastathopoulou *et al.*, 2007) and investors (Deller *et al.*, 1999). Furthermore, it also important in the process of transferring information, thoughts or emotional attitude of an individual or group to another individual or group (Theodorson and Theodorson, 1999).

The findings confirm ICT is a key factor in company development and has to attend adequately to the challenge posed by the adoption of various technologies within their organisation (Haeckel, 1985). Despite the importance of ICT in organisations, its studies in relation to corporate communication are limited at best both conceptually (Argenti, 2006) and empirically (Pae *et al.*, (2002). One study has been completed by Papastathopoulou *et al.* (2007) exploring the factors affecting intra organisational diffusion of innovation advantage and confirming the role of ICT diffusion innovation on CCM.

The test of hypothesis H2b supports the statement that ICT diffusion innovation is believed to have a direct, positive effect on mission achievement. The implementation of ICT diffusion innovation in organisations is crucial to organisational success in terms of both the redirection and the integration of the organisation as a system (Wager, 1962) and also for general organisational effectiveness (Rogers and Agarwala-Rogers, 1976). Thus, ineffective ICT implementations affect organisational performance such as cost and time over-runs (Regan and O'Connor, 2000; Songer *et al.*, 2001); user resistance (Stephenson and Blaza, 2001; Villeneuve and Fayek, 2003); failure to achieve expected benefits (Gottschalk, 1999) and declining overall work performance (Murray and Mavrokefalos, 2000; Rojas and Songer, 1999).

In this study, ICT diffusion innovation is considered as something which supports mission achievement, in line with another research related to organisational performance (Gottschalk, 1999; Murray and Mavrokefalos, 2000; Regan and O'Connor, 2000; Rogers and Agarwala-Rogers, 1976; Rojas and Songer, 1999; Songer *et al.*, 2001; Stephenson and Blaza, 2001; Villeneuve and Fayek, 2003; Wager, 1962). In addition, the current study shows the impact of management ICT diffusion innovation such as supervisor and organisational support, professional development and technical support and supporting tangible and intangible

reward on mission achievement. Therefore, the findings illustrate that if the management of ICT diffusion innovation is ineffective, the mission achievement of the organisation is likely to be affected.

Corporate Leadership

The results support the notion that corporate leadership perception has a direct, positive effect on CCM (H3a). Previous studies stress that there is a relationship between corporate leadership and good communication (Hetland and Sandal, 2003; Oakland, 1993; Oh *et al.*, 2001; Snyder and Morris 1984; Takala, 1997). This is also in line with Kouzes and Posner (1987), who urge corporate organisations to have good leaders to communicate their visions in various ways, including personal communication and written statements to appeal to senses and emotions when communicating to subordinates (Takala, 1997).

Evidence indicates leadership behaviour influences organisational performance (Avolio, 1999; Bass and Avolio, 1994; Bass and Yammarino, 1991; Keller 1992; Yammarino and Bass, 1990). However, the current study exhibits no support for hypothesis H3b regarding the effects of corporate leadership on financial performance. The leadership effects on organisational performance are diverse (Jacobs and Singell, 1993). The contextual effects of the research might influence the findings of the current research. For example, research conducted by Lieberson and O'Connor (1972) in the largest 167 firms over a 20-year period, found there are relationships between shifts in corporate chief executive officers (CEOs) and standard indicators of corporate performance (sales, net earnings, and profits). However, when comparing the effects of shifts in CEOs to global measures of socioeconomic contexts, leadership effects were modest. Furthermore, Weiner and Mahoney (1981) replicated this study with different samples of large firms, even though their method was different; their conclusions were identical to those of Lieberson and O'Connor. The findings of both studies suggest that institutional or contextual effects matter more than shifts in CEO's that can also affect the study of CCM.

The test of hypothesis H3c supports the assertion that corporate leadership has a direct, positive effect on mission achievement. This finding was supported based on a previous study (Elenkov, 2002; Owen *et al.*, 2001; Yammarino and Bass, 1990). In general, leadership style

affects employee attitudes, satisfaction and job performance (Bass et al., 1987; Waldman et al., 1987). Furthermore, there is research that links leadership and other non-financial performance, including several studies related to organisational mission. For instance, Yammarino and Bass (1990) believe the character of a leader who articulates a vision of the future and then shares with peers and subordinates will stimulate subordinates intellectually in order to motivate them to achieve the organisational mission. At this point, a corporate leadership characteristic such as charisma has the highest impact on the mission achievement. Therefore, the current study findings are congruent with Elenkov (2002) who illustrate that a leader who displays more charisma, individualised consideration and intellectual stimulation positively contributes to the achievement of organisational goals.

6.4 Organisational Performance as a Consequence of CCM

Research focusing on the general impact of communication on performance has tended to measure global indicators of corporate productivity (Lull *et al.*, 1955), communication effectiveness (Tubbs and Hain, 1979), and satisfaction (Pincus, 1986). Furthermore, Campbell (1993), Forman and Argenti (2005) and Pincus (1986) assume that financial performance may be an outcome of CCM. The results offer strong evidence in this respect, indicating a definite positive relationship between CCM and financial performance (H4a). Even though the relationship between CCM and financial performance is not well established the close field to corporate communication such as communication and marketing both variables shows a strong relationship (Kohli and Jaworski, 1990; Narver and Slater, 1990). The results from this study are consistent with prior studies (Gudykunst and Nishida, 2001) that also found a positive relationship between CCM and financial performance.

However, the mission achievement (non financial performance) has no significant relation with CCM (H4b). Ditlevsen and Kastberg (2007, p.11), label corporate communication as 'mediational properties' constituting the interface between the strategic and operational levels of communication management that support decision-making processes to ensure the communication are in line with the mission, vision and value of an organisation. Yet the result from this study is not consistent with prior studies (Chang and Abu Hassan, 2006; Gudykunst and Nishida, 2001; Lull *et al.*, 1955; Pincus, 1986) Therefore, the results show that the mission achievement is not dependent on CCM.

CHAPTER 7: CONCLUSION

7.1 Introduction

The findings of this study aim to fill the research gaps primarily by providing insights to establish the strategic view of the antecedents and consequences of CCM. In addition, this study tested theories in a different setting (non-western) in order to test the applicability or otherwise of these in contexts other than the west, which predominates in the literature in this field. The study employed a mix-method approach consisting of a dominant quantitative method (a survey) and a less-dominant qualitative method (an interview) component. In the first phase, interviews were conducted, and these were followed by the online survey. This was then followed by data analysis using the technique of structural equation modelling (SEM); and, finally, a summary of theoretical implication of the research.

To sum up, CCM was found to be a unidimensional construct. Furthermore, the theoretical model has proven useful to the organisations and the conceptual model presented demonstrates robustness. It was found that corporate culture, ICT diffusion innovation and corporate leadership are factors that influence CCM directly, while the financial performance correlates positively with CCM has no effect on mission achievement. Corporate culture was found to have a positive relationship with mission achievement, but a negative relationship with financial performance. Furthermore, ICT diffusion innovation demonstrates a positive association with mission achievement. Despite corporate leadership having a positive relationship with mission achievement there was no effect on financial performance. Therefore, this study addressed the antecedents and consequences of CCM, and they are found to be influential factors.

7.2 Implications of Research Findings

7.2.1 Theoretical Implications

CCM has gained much attention in the communication and marketing literature over the years. This section discusses and evaluates the contribution of the study to communication and marketing theory.

Firstly, the literature and the scholarly community need new contexts to test the validity and applicability of theories developed in the West (Boyacigiller and Adler, 1991; Peng et al., 1991; Sekaran, 1981). New research is important in order test the connection of existing theory to the new context (Tsui, 2006) because most of the theories in the literature on CCM are derived from sets of assumptions that relate to a western culture, and thus reflect this particular culture and the institutional underpinnings which are also based on a western culture. Therefore, examining the CCM model in Malaysia adds additional insights to the extant literature, because Malaysian managers and their cultural backgrounds are substantially different from those of western countries (Abdullah and Lim, 2001; Hofstede, 1980). The culture of the west is said to be individualistic in nature, and that of Malaysia is said to be more collectivist (Hofstede, 1980). The findings of the study suggest that what has been seen to apply in Western theory may or may not apply to another, including that of Malaysia. The model explains the determinants and consequences of CCM in Malaysian public listed companies. This may indicate that the model may have wider applicability than merely the Malaysian context.

Secondly, the lack of conceptualising and understanding areas of practice and also the lack of contextual understanding of the practice dimensions (Belasen, 2008; Cornelissen *et al.*, 2006; Stainer and Stainer, 1997) is a major gap in the CCM body of knowledge. In an attempt to address this gap, this study has identified some functions of CCM in the context of public listed companies This study focused on the perspective of corporate communications and public relations managers, to gain a deeper understanding of the CCM functions. The CCM concept and its relationship to other constructs became the focal point of this research. Consequently, the findings elicited five main components of CCM from the managerial perspective: publications, corporate social responsibility, media programmes, investor relations programmes and open communication aspects. The findings assist corporate communication managers and practitioners to identify the practical needs of practitioners to improve their CCM programme.

Third, this study verifies existing measurement instruments, whether newly constructed or collected from other research that were previously used in different countries, cultures and settings. For instance, the instrument to measure CCM was a newly developed from the

multiple literature review. It was purified and tested in order to fill a gap suggested by recent study (Forman and Argenti, 2005). Therefore, the processes of adapting and testing a new scale from a Malaysian context are essential. In the quantitative stage, rigorous statistical analysis has been used to check the validity and reliability of the measurement items of the constructs. In the findings of this research, all measurement instruments mainly appear valid in their original content, but a number of items in the purified scales are not the same as those of the original scales. Although some items were culled along the process some of the measurement items satisfied the reliability and validity criteria in the research. Therefore, this study contributes to the literature by modifying the measurement scale for certain constructs which were tested within a different context (that of Malaysia).

Finally, the results show that the antecedents constructs (corporate culture, ICT diffusion innovation and corporate leadership) have a direct impact on CCM. Therefore, a theoretical implication of this study is that it presented the statistically significant relationship. The structural model was estimated to establish the antecedent constructs relative weighting that affected CCM. For instance, corporate culture had the greatest impact, followed by the management of ICT diffusion innovation and then corporate leadership. The factors influencing CCM in a specific context, namely public listed companies, is one of the major steps forward provided by this research. Moreover, the important implications of the current research are the establishment of a strategic CCM role in public listed companies and it is beneficial for top management to understand the corporate communication practitioner's needs.

7.2.2 Managerial Implications

This research focused on CCM in the public listed companies' context from the manager's perspective and its effect on organisational performance. Therefore, the number of managerial implications extracted from the results was the basis of recommendation to corporate communication and public relations managers. Additionally, some guidance on CCM programmes provided from this study is outlined next.

First, for a decade, the Malaysian government has aggressively attracted foreign investors to do business and invest in Malaysia. As a result, Malaysia has become a fast developing

country where the business environment is comprehensive and diverse (Sriramesh and Vercic, 2003). Due to this development the knowledge in corporate communications and the challenge of creating CCM best practice are of great interest among the business community. Organisations are finding this useful to understand the factors that contribute in enhancing CCM practices and its impact on performance. For example, the findings in this study would have the potential to inform and lead managers within public listed companies to consciously work harder to improve and strengthen CCM in order to have better relations with their internal and external stakeholders. CCM functions such as corporate social responsibility, media relations and investor relations programmes should be given more attention because they indicate that they may have a positive and significant effect on performance.

Second, the study found CCM to be a vital instrument to gain a competitive advantage in a corporate setting (Forman and Argenti, 2005; Yamauchi, 2001). Strong CCM functions are important in order for the organisation to execute management strategies to their stakeholders by creating desired outcomes through material resources and managing good communication. Therefore, CCM can be perceived as an important competitive instrument to support the organisation in its pursuit of strategic business objectives and goals. The elements of strategy can be found from the integration of three forms of communication: management communication related to both internal and external stakeholders; marketing communications in relation to advertising and selling; and organisational communication such as internal media and public relations (Stainer and Stainer, 1997). This study has shown the strategic functions of CCM which can be implemented by managers to improve organisational performance.

Third, CCM, as evident in this study, was found to an important factor in developing financial performance, as many agree (for example, Burson, 1992; Forman and Argenti, 2005; Macnamara, 2006). Prior to achieving a better performance public listed companies should aim to increase the degree of constructs that positively influence CCM such as corporate culture, ICT diffusion innovation and corporate leadership by setting an effective internal environment. These constructs influence CCM. In addition, top management must ensure strong communication policies are being practised when they communicate with the internal stakeholders. The study clearly indicates the concern of top management regarding

the factors discouraging or encouraging CCM which are important in order to provide better and effective communication systems within companies.

Fourth, although, many corporate communication practitioners recognise the importance of CCM, they have limited knowledge of CCM functions (Belasen, 2008; Cornelissen, 2008). They also lack information on the factors affecting CCM. This study demonstrates corporate culture has a strong influence and is confirmed as one of the critical factors to achieve CCM best practice. It is also supported by other studies that find corporate culture to be an important variable that may help explain the communication activities of organisations (Sriramesh *et al.*, 1996). Therefore, corporate communication managers can enhance CCM by emphasising the corporate culture in order to create a positive CCM. For instance, managers should focus on basic elements of culture such as enhancing loyalty among members, setting goals for the organisation and adopting appropriate leadership styles because if the corporate culture is not in good shape, then it will affect the CCM. As a consequence, the top management should focus on the corporate culture within the organisation where success in the organisation is more dependent upon the cultural focus (Schneider, 1990).

Fifth, this study also advocates corporate communication managers integrate the instruments of ICT diffusion innovation in their technology improvement programme in order to understand the management role of ICT. This action would help them to look ahead by anticipating the needs of their stakeholders. For instance, managers, whether those in corporate communication or anywhere else, need to focus on professional development and technical support; and supervisors and organisational support as recommended by Peansupap and Walker (2005). The organisation should also develop a continuous staff improvement programme by providing training and empowering them in communication and ICT skills. Training is seen as being one of the most important corporate communication strategies which may enhance practitioner skills. Therefore, some budget should be allocated to train organisational members in communication technology that will enhance their skills and which may in turn better enable them to meet organisational needs.

Finally, financial performance shows as a positive outcome, whereas mission achievement is less useful in relation to CCM. Even though the mission achievement has no significant

relation with CCM it shows a positive relationship with corporate culture, ICT diffusion innovation and corporate leadership. As the culture, technology development and leadership style assist any organisation in achieving its goals, top management of companies need to display charisma, individualised consideration and intellectual stimulation that positively contribute to the achievement of organisational goals (Elenkov, 2002).

7.3 Limitations and Future Research

7.3.1 Limitations of the Study

First, the qualitative study was limited to a small number of respondents (12 respondents) and the respondents did not represent all 12 industries classified by the Securities Commission of Malaysia on public listed companies. Therefore, the results could be different if the qualitative study for item development included respondents from all industries. It might be that some important constructs were not included in the conceptual model or may have included some inappropriate constructs.

Secondly, this survey also adapted a measurement scale from the literature. Some measurement items were culled during the item refinement process, because these items did not measure the construct domain very well and it may be that a similar study carried out in a different context might perhaps mean that different items are culled. Most of the items were deleted in the data cleaning process before the CFA that might be a significant item to the overall model fit.

Third, in the quantitative data collection stage, the online survey was conducted based on a sample of managers from public listed companies in Malaysia. The organisational behaviour and attitude of public listed companies cannot be generalised to other types of companies or organisations such as private limited companies, cooperative, partnerships and government agencies. Furthermore, the sample of this study was restricted to only Malaysian respondents. Therefore, the findings of the present study may not be representative of such non western culture.

7.3.2 Direction for Future Research

Five directions are suggested for future research to widen the body of knowledge in the literature on CCM. Since this study has simply examined the CCM of public listed companies in Malaysia, future research should replicate the model to investigate its generalisability to other research contexts (other countries) and types of organisation other than public listed companies (government agencies, cooperative, etcetera). The testing should involve the application of CFA and the assessment of overall model fit.

Second, this research is conducted in twelve different sectors of public listed companies in Malaysia. The finding has shown the general model of CCM for the overall setting which may be different if the research focuses on the specific sectors. For example, the sector of industrial products has different interests and stakeholders as compared to the banking sector, which will affect the overall CCM model. Future studies should explore whether the findings for the specific sector vary from the combination of all sectors.

Third, this study found that CCM has a positive relationship with financial performance, but has no relationship with mission achievement. The consequences of CCM have been chosen from both performance measurements (financial and non financial). The financial performances are measured by accounting-based data and mission achievements are measured by a manager's perceptions. Thus, future research should attempt to explore the other outcomes of CCM such as corporate reputation or other management variables (job satisfaction or commitment).

Fourth, corporate communication consists of two groups of stakeholders, internal and external stakeholders. This study focused on the managerial perspective of public listed companies; consequently, only controllable communication (Balmer and Soenen, 1998; Melewar and Karaosmanoglu, 2006) has been included in the scale of CCM. The perspective of other internal stakeholders (employee) and external stakeholders (customer, investor, other) are not counted in the CCM model. Therefore, future research should be conducted

from other stakeholder groups. Each group of stakeholders has specific needs and the findings will help the manager to design effective corporate communication programmes.

Fifth, future research should attempt to validate all the measurement scales in this study. Some of the concepts in this research have been widely used (for example, corporate culture and corporate leadership) in existing studies; nevertheless, there is more room to improve and test these variables from different contexts of study. Further research will help to prove the generalisability of these concepts. Finally, this research cannot make a full causal inference; therefore, a longitudinal study, which allows a researcher to monitor the dynamic causal relationship (Fombrum and Shanley, 1990), should be undertaken.

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APPENDICES

Appendix 4. 1 : CCM items as rated by experts for content validity

					Е	Experts		-			
Items	1	2	3	4	5	6	7	8	9	10	CVI
CCM01	2	4	4	4	1	2	2	4	4	4	7/10 = .70
CCM02	3	3	2	4	1	4	4	2	4	4	7/10 = .70
CCM03	3	4	4	4	4	4	4	3	4	4	10/10 = 1.00
CCM04	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM05	4	4	4	3	1	4	4	3	4	4	9/10 = .90
CCM06	1	4	1	2	4	3	4	4	4	4	7/10 = .70
CCM07	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM08	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM09	4	4	2	4	4	2	4	4	2	4	7/10 = .70
CCM10	4	4	4	4	4	3	4	3	2	4	9/10 = .90
CCM11	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM12	4	4	1	4	4	2	4	2	4	4	7/10 = .70
CCM13	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM14	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM15	4	2	1	2	4	3	4	4	4	4	7/10 = .70
CCM16	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM17	4	4	4	4	4	2	2	2	4	4	7/10 = .70
CCM18	4	4	4	3	4	3	4	4	4	4	10/10 = 1.00
CCM19	4	4	4	4	4	3	3	4	4	4	10/10 = 1.00
CCM20	2	4	4	4	4	2	4	2	4	4	7/10 = .70
CCM21	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM22	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM23	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM24	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM25	2	4	4	4	4	2	2	3	4	4	7/10 = .70
CCM26	4	4	4	4	4	3	4	3	4	4	10/10 = 1.00
CCM27	4	4	4	4	4	3	3	4	4	4	10/10 = 1.00
CCM28	3	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM29	3	4	4	4	4	3	4	4	4	3	10/10 = 1.00
CCM30	4	3	4	4	4	3	4	4	4	3	10/10 = 1.00
CCM31	4	4	4	4	4	3	4	3	4	4	10/10 = 1.00
CCM32	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CCM33	4	4	4	4	4	2	4	2	4	2	7/10 = .70

Appendix 4. 2: Corporate culture items as rated by experts for content validity

					Е	Experts					_
Items	1	2	3	4	5	6	7	8	9	10	CVI
CC01	3	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC02	3	4	4	3	3	3	4	4	4	4	10/10 = 1.00
CC03	3	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC04	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC05	3	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC06	2	4	4	4	3	4	4	4	4	4	10/10 = 1.00
CC07	4	4	4	4	3	3	3	4	4	4	10/10 = 1.00
CC08	3	4	4	4	4	3	4	4	4	3	10/10 = 1.00
CC09	4	4	4	4	4	3	4	4	4	3	10/10 = 1.00
CC10	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC11	2	4	4	4	3	3	4	4	4	4	9/10 = .90
CC12	4	4	4	4	4	3	3	3	4	4	10/10 = 1.00
CC13	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC14	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC15	4	4	4	4	4	2	2	2	4	4	7/10 = .70
CC16	3	4	4	4	3	3	4	4	4	4	10/10 = 1.00
CC17	4	4	4	4	4	3	3	4	4	4	10/10 = 1.00
CC18	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC19	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC20	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
CC21	2	4	4	4	4	2	4	4	2	4	7/10 = .70
CC22	2	4	4	4	2	3	4	4	4	2	7/10 = .70
CC23	2	4	4	4	4	2	4	4	4	2	7/10 = .70
CC24	4	1	4	4	2	2	4	4	4	4	7/10 = .70

Appendix 4. 3: ICT diffusion innovation items as rated by experts for content validity

					E	Experts					_
Items	1	2	3	4	5	6	7	8	9	10	CVI
ICT01	4	2	4	4	4	1	4	1	4	4	7/10 = .70
ICT02	4	4	4	4	4	3	4	3	4	4	10/10 = 1.00
ICT03	3	4	4	4	4	3	4	3	4	4	10/10 = 1.00
ICT04	3	4	4	4	4	3	4	3	4	4	10/10 = 1.00
ICT05	3	4	4	4	4	3	4	3	4	4	10/10 = 1.00
ICT06	4	2	4	4	4	2	4	1	4	4	7/10 = .70
ICT07	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT08	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT09	4	4	4	4	2	2	4	4	2	4	7/10 = .70
ICT10	4	4	4	4	3	3	4	4	4	4	10/10 = 1.00

Appendices	A	p	p	e	n	d	i	C	e	S
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ICT11	3	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT12	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT13	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT14	1	4	4	4	4	2	4	2	4	4	7/10 = .70
ICT15	3	4	4	4	4	3	4	3	4	4	10/10 = 1.00
ICT16	3	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT17	4	4	4	4	1	3	2	2	4	4	7/10 = .70
ICT18	3	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT19	2	4	4	4	4	2	1	4	4	4	7/10 = .70
ICT20	2	4	4	4	4	3	4	4	4	4	9/10 = .90
ICT21	3	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT22	2	2	4	4	4	1	4	4	4	4	7/10 = .70
ICT23	4	4	4	4	4	3	4	4	4	4	10/10 = 1.00
ICT24	1	4	4	4	4	2	4	1	4	4	7/10 = .70

Appendix 4. 4 : Corporate leadership items as rated by experts for content validity

					E	Experts					_
Items	1	2	3	4	5	6	7	8	9	10	CVI
CL01	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL02	2	4	4	4	4	4	4	4	4	4	9/10 = .90
CL03	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL04	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL05	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL06	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL07	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL08	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL09	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL10	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL11	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL12	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL13	1	4	4	4	4	2	4	2	4	4	7/10 = .70
CL14	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL15	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL16	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL17	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL18	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
CL19	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00

Appendix 4. 5: Mission achievement items as rated by experts for content validity

					E	Experts					_
Items	1	2	3	4	5	6	7	8	9	10	CVI
MA01	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA02	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA03	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA04	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA05	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA06	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA07	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA08	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA09	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA10	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA11	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA12	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA13	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA14	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA15	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA16	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA17	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA18	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA19	4	4	4	4	4	4	4	4	4	4	10/10 = 1.00
MA20	3	4	4	4	4	4	4	4	4	4	10/10 = 1.00

Appendix 4. 6: Questionnaire for content validity



-CONTENT VALIDITY-

TITLE: INVESTIGATING THE ANTECEDENTS AND CONSEQUENCES OF CORPORATE COMMUNICATION MANAGEMENT (CCM)

Research developed at Brunel University, West London (United Kingdom) and Universiti Utara Malaysia, Sintok (Malaysia)

If you require more information about the questionnaire, please contact:

Bahtiar Mohamad, Ph.D Researcher, Room 356, Michael Sterling Building, Brunel Business School, Brunel University, West London, UB8 3PH, Uxbridge, United Kingdom

Telephone: +44 (0)1895267263 Mobile: +44(0)7532072703 Email: Bahtiar. Mohamad @brunel.ac.uk

INSTRUCTIONS – This measures is designed to evaluate the content validity of a measure. Please rate each item as follow:

- 1. Please rate the level of representativeness on a scale of 1-4, with 4 being the most representative. Space is provided for you to comment on the item or to suggest revisions.
- 2. Please indicate the level of clarity for each item, also on a four-point scale. Again, please make comments in the space provided.
- 3. Finally, evaluate the comprehensiveness of the entire measure by indicating items that should be deleted or added. Thank you for your time.

SECTION A: PANEL OF EXPERT INFORMATION Instruction: Please tick (X) the appropriate box. Gender Your current age (years) 2. 1 Less than 30 1 Male 31-40 Female 2 3 41-50 More than 51 Job position Your highest level of education: 4. 3. 1 Corporate Communication/PR Practitioner 1 SPM/STPM/Diploma 2 Academician 2 Degree / Master 3 Consultant 3 PhD 4 Other (please specify) 4 Other (please specify)

SECTION B: CORPORATE COMMUNICATION MANAGEMENT (CCM)

The enclosed survey asks you to evaluate how representative the items are of the content domain of Corporate Communication Management (CCM). That is, to what extent do you think that each question on the survey measures CCM? The clarity of each item is another important aspect for you to evaluate. Specifically, indicate how clear you think each item is. Finally, you are asked to evaluate the overall comprehensiveness of the entire measure by either adding or deleting items.

Theoretical definition	Representativenes s	Clarity
Corporate communication as a management of the perceptions of an organisation (Schmidt, 1995). The perception of stakeholder can be influenced from all internal and external information (message of communication) means and measures (Cornelissen, 2008). The collective message from both sources (Haynes, 1990) conveys an organisations identity through every form, manner and medium of communications to its stakeholder. Management plays a key role in the development and maintenance corporate communication by giving their focus to the controllable communication in the organisations. These include communications with internal stakeholder (employee), and also external stakeholder (media, investor and government).	1 = item is not representative 2 = item needs major revisions to be representative 3 = item needs minor revisions to be representative 4 = item is representative	1 = item is not clear 2 = item needs major revisions to be clear 3 = item needs minor revisions to be clear 4 = item is clear

		Please rate from 1 - 4	Please rate from 1 - 4
1.	We promote our corporate identity through corporate advertising.		
2.	We communicate the brand identity to be congruent with the brand image through a corporate advertising.		
3.	We manage the advertisements, marketing and promotion (AMP) programme for the company's brand positioning.		
4.	We are responsible to design all corporate visual identity (e.g. logo, slogan or typography) for our company.		
5.	We developed our own content for corporate advertising and other advertisement materials.		
6.	We have regular dialogues with the government agencies (e.g. Matrade, Mida and Security Commission) that related to our business.		
7.	We manage the issues related to our products / services and create a mutual understanding between organisation and stakeholder.		
8.	We try to build good image of the company through community relations (i.e. open day, hari raya event and recycle campaign) activities.		
9.	We align organisational activities with external expectation and meet the industry regularity requirement.		
10.	We help organisations to understand the issues management and strategically adapt to organisational public policy environment.		
11.	We are responsible to produce publications for the company (e.g. newsletter, company profile and corporate brochures).		
12.	We manage regular communication or function as liaison with various stakeholders.		
13.	We organise Corporate Social Responsibilities (e.g. sponsorship, charities and education) programme for stakeholders engagement and participation.		
14.	We control the content of electronic publication (e.g. e-newsletter, electronic press releases and corporate website) for our company.		
15.	We participate in conference and seminar locally and internationally to promote and create awareness about our company.		

16.	We organiseexternal events (e.g. awareness campaign, trade exhibition and product launch) to keep board members and employees engaged with external stakeholder.	
17.	We developed and implement communication policies in our company.	
18.	Our works includes speech writing, translations and documentation process for various important documents.	
19.	We organise media programmes (e.g. media night or golf with media) to build a relationship with the media.	
20.	We do special media interviews to create awareness and literacy programme about our business activities.	
21.	We are responsible to address media needs and concerns professionally at any time.	
22.	We archive and manage all photographs and video related to our company for future use.	
23.	We are responsible for press release and media conferences if necessary.	
24.	We work with company secretary to organise annual general meeting where the company will announce the annual financial result to their shareholder.	
25.	We manage statutory communication (e.g. merger and acquisition or new CEO appointment) to Bursa Malaysia before releasing the information to the public.	
26.	We work closely with finance department to prepare annual report and quarterly financial report.	
27.	We providing information and manage relationship with the investor through various programme (e.g. investor relations programme and annual general meeting).	
28.	We create a positive context and better perspective on financial data to show positive performance of the company.	
29.	We provide training (e.g. communicate to the public and understand the public needs) at lower level up to highest level to build internal branding for the company.	
30.	We help the company create open communication within the organisation during a particular crisis (i.e. sales drop, economic down turn or merger and acquisition)	
31.	We assist the HR to explain key initiative the company is taking and manage change on regular basis through dialogue in the organisation.	
32.	We manage internal communication (e.g. newsletter, town hall or face to face) which is a process of cascading down the company's internal guidelines, internal principle and vision to the employees.	
33.	We organised internal events (e.g. family day, workshop or boot camp) to stimulate a team spirit and motivate them toward company's vision.	
	ments on items	
	se specify the	
item,		

Overall comments of the entire	
measure by either	
adding or deleting	

SECTION C: CORPORATE CULTURE

The enclosed survey asks you to evaluate how representative the items are of the content domain of Corporate Culture That is, to what extent do you think that each question on the survey measures corporate culture? The clarity of each item is another important aspect for you to evaluate. Specifically, indicate how clear you think each item is. Finally, you are asked to evaluate the overall comprehensiveness of the entire measure by either adding or deleting items.

Theoretical definition	Representativenes s	Clarity
values and behaviour. These dimensions serve as a substructure for an organisation's management system as well as the set of management practices and behaviour. Furthermore, corporate culture is defined as "the pattern of shared values and beliefs that help individuals understand organisational functioning and thus provide the norms for behaviour in the organisation" as proposed by Deshphande and Webster (1989: 4).	1 = item is not representative 2 = item needs major revisions to be representative 3 = item needs minor revisions to be representative 4 = item is representative	1 = item is not clear 2 = item needs major revisions to be clear 3 = item needs minor revisions to be clear 4 = item is clear

		Please rate from 1 - 4	Please rate from 1 - 4
1.	My organisation is a very personal place. It is like an extended family. People seem to share a lot of themselves.		
2.	The head of my organisation is generally considered to be a mentor, sage, or a father or mother figure.		
3.	The glue that holds my organisation together is loyalty and tradition. Commitment to this firm runs high.		
4.	My organisation emphasizes human resources. High cohesion and morale in the firm are important.		
5.	We are happy to work together as a team and always compliment each other.		
6.	My organisation is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.		
7.	The head of my organisation is generally considered to be an entrepreneur, and innovator, or a risk taker.		
8.	The glue that holds my organisation together is a commitment to innovation and development. This is an emphasis on being first.		
9.	My organisation emphasizes growth and acquiring new resources. Readiness to meet new challenges is important		
10.	My organisations actively instil entrepreneur spirit. The strategic thinking skills are driving towards that to be more business minded.		
11.	My organisation is a very formalized and structural place. Established		

	procedures generally govern what people do.	
12.	The head of my organisation is generally considered to be coordinator, an organiser, or an administrator	
13.	The glue that holds my organisation together is formal rules and policies. Maintaining a smooth running institution is important here.	
14.	My organisation emphasizes permanence and stability. Efficient, smooth operations are important.	
15.	My organisation controls the communication within the company. Every statement should get a consent and approval before goes out from the organisation.	
16.	My organisation is very production oriented. A major concern is with getting the job done, without much personal involvement.	
17.	The head of my organisation is generally considered to be a producer, a technician, or a hard-driver.	
18.	The glue that holds my organisation together is the emphasis on tasks and goal accomplishment. A production orientation is commonly shared.	
19.	My organisation emphasizes competitive actions and achievement. Measurable goals are important.	
20.	My organisation is very performance driven. Every personal performance in my organisation based on Key Performance Indicator (KPI).	
21.	My organisation believes that teamwork, participation and consensual decision-making will lead to the success of the organisation.	
22.	My organisation has the stories of heroic deeds as part of the organisation's culture. These heroic deeds are also considered part of doing the job.	
23.	My organisation's members highly value standardized goods and customer service.	
24.	My organisation does not emphasize on social relationship among workers.	

Comments on items	
(Please spesify the	
item):	
Overall comments	
of the entire	
measure by either	
adding or deleting	

SECTION D: ICT DIFFUSION INNOVATION

The enclosed survey asks you to evaluate how representative the items are of the content domain of ICT Diffusion Innovation. That is, to what extent do you think that each question on the survey measures ICT diffusion innovation? The clarity of each item is another important aspect for you to evaluate. Specifically, indicate how clear you think each item is. Finally, you are asked to evaluate the overall comprehensiveness of the entire measure by either adding or deleting items.

Theoretical definition	Representativenes s	Clarity
within the organisational context and its effects to CCM. The research has the potential to suggest possible ICT innovations that may be applied in the corporate organisation to improve the communication internally and externally and also the organisation's performance. The three factors related to management in the model comprise of professional development and technical support; supervisor and organisational support; and supporting tangible and intangible reward.	major revisions to be representative 3 = item needs minor revisions to be	1 = item is not clear 2 = item needs major revisions to be clear 3 = item needs minor revisions to be clear 4 = item is clear

_		Please rate from 1 - 4	Please rate from 1 - 4
1.	I am confident that ICT tools that we are expected to use here have the		
	necessary levels of functionality to motivate me to use them		
2.	I am given enough quality of training for learning about and applying the		
	ICT tools that I am expected to use here		
3.	I am given enough time for training for learning about and applying the		
	ICT tools that I am expected to use here		
4.	I am given enough flexibility in my job demands (in terms of		
	rescheduling daily demands and activities and so on) to learn how to		
	apply ICT tools that I am expected to use here		
5.	Our work procedures support our capacity to use ICT tools that I am		
	expected to use here		
6.	I have been given sufficient time to think about how I can best use ICT		
	tools that I am expected to use here		
7.	Organisational technical support is sufficient (e.g., help desk, and		
	getting software operational) to allow me to learn about and apply ICT		
	tools that I am expected to use here.		
8.	Mentoring support is sufficient to allow me to learn about and		
	understand how to effectively apply the ICT tools that I am expected to		
	use here		
9.	I was given the opportunity to trial and experiment ICT tools that I am		
	expected to use here		
10.	The result/benefit of using ICT tools that I am expected to use here		
	were easy to observe		
11.	My organisation is aware of the latest technology coming to the		
	mainstream and giving me an opportunity to adopt them.		
12.	My immediate supervisor encourages me to learn about and/or apply		
	ICT tools that I am expected to use here		
13.	I enjoy learning from others about applying ICT tools that we are		
	expected to use here		
14.	I can trust my immediate supervisor that if I make some mistakes when		
	first getting to grips with ICT tools that I am expected to use here I will		

	not be blamed and pressured when learning and practicing these tools	
15.	My immediate supervisor in my organisation is open to suggestions on improving the way that ICT tools that I am expected to use here are used	
16.	Our organisation supports our ability to share experience of ICT tools that I am expected to use here.	
17.	My immediate supervisors an avid user of ICT to communicate to employees through email and blog.	
18.	The management is very supportive and understand that ICT can help business become more efficient and make our work better.	
19.	My immediate supervisor encourages me to usesocial media (facebook, blog and twitter) as a communication tools in my organisation.	
20.	Our organisation provides tangible rewards (bonus, promotion, and so on) to those who share ideas and experience about ICT tools that I am expected to use here	
21.	Our organisation provides intangible rewards (recognition, thanks or public praise) to those who share ideas and experience about ICT tools that I am expected to use here	
22.	I receive tangible rewards (advancement, additional pay, security, or better job prospects) from using ICT tools that we are expected to use here	
23.	I receive intangible rewards (respect, admiration, self fulfillment, feel good about myself) from using ICT tools that we are expected to use here	
24.	Competencies in ICT is one of the elements in Key Performance Indicator (KPI) in my organisation.	

Comments on items (Please specify the item):		
Overall comments of the entire measure by either adding or deleting		

SECTION E: CORPORATE LEADERSHIP

The enclosed survey asks you to evaluate how representative the items are of the content domain of Corporate Leadership. That is, to what extent do you think that each question on the survey measures corporate leadership? The clarity of each item is another important aspect for you to evaluate. Specifically, indicate how clear you think each item is. Finally, you are asked to evaluate the overall comprehensiveness of the entire measure by either adding or deleting items.

Theoretical definition	Representativenes s	Clarity
Several studies have found significant relationships between transformational leadership and organisational functioning .Within an organisation for example, the leader plays a monumental role as an information provider to his or her subordinates at various levels. Generally, leadership can be defined as a person who has an ability to inspire, motivate, and create commitment to common goals is crucial (Bass, 1997). Corporate leadership must show willingness to take risks and to accept occasional failures as being natural	representatitve 2 = item needs major revisions to be representative 3 = item needs minor revisions to be	1 = item is not clear 2 = item needs major revisions to be clear 3 = item needs minor revisions to
(Kohli and Jaworski, 1990).	representative 4 = item is representative	be clear 4 = item is clear

 He/she makes me feel good to be around him/her. I have complete faith in him/her. I am proud to be associated with him/her. He/she expresses with a few simple words what I cou 	ld and should do.	
 3. I am proud to be associated with him/her. 4. He/she expresses with a few simple words what I cou 	ld and should do.	
4. He/she expresses with a few simple words what I cou	ld and should do.	
	ld and should do.	
5. He/she provides appealing images about what I can d	0.	
6. He/she helps me find meaning in my work.		
7. He/she enables me to think about old problems in ne	w ways.	
8. He/she provides me with new ways of looking at puzz	ling things.	
9. He/she gets me to rethink ideas that I had never ques	tioned before.	
10. He/she helps me to develop myself.		
11. He/she lets me know how he/she thinks I am doing.		
12. He/she gives personal attention to others who seem is	ejected.	
13. He/she teach me about new knowledge and how to b person.	e an intellectual	
14. He/she explains the reason and rational behind action him/her.	taken by	
15. He/she communicate well and send a very clear vision message to me.	and systematic	
16. He/she is very transparent and consistent with his/he	r decision.	
17. He/she is always able to deliver his/her promise.		

18.	He/she give me freedom to accomplish my work successfully.	
19.	He/she willing to meet the staff if they need clarification on certain	
	issues.	

Comments on items	
(Please specify the	
item):	
,	
Overall comments	
of the entire	
measure by either	
adding or deleting	

SECTION F: MISSION ACHIEVEMENT

The enclosed survey asks you to evaluate how representative the items are of the content domain of Mission Achievement. That is, to what extent do you think that each question on the survey measures mission achievement? The clarity of each item is another important aspect for you to evaluate. Specifically, indicate how clear you think each item is. Finally, you are asked to evaluate the overall comprehensiveness of the entire measure by either adding or deleting items.

Theoritical definition	Representativeness	Clarity
The objective of mission statement is to communicate the organisation's direction to stakeholders (Bartkus, Glassman and McAfee, 2004). Despite the fact that corporate organisations operate in several contexts (non profit or profit organisation), mission statement are created to communicate an organisation's positive image to their respective stakeholders. For examples, Bart et al (2001) suggest that the mission statement that are most likely to be correlated with employee satisfaction with the mission address specific issues such as the firm's purpose, values and strategy. The effective and enduring mission statement will reflect employee's motivations for engaging in the company's activities (Niven, 2003).	1 = item is not representative 2 = item needs major revisions to be representative 3 = item needs minor revisions to be representative 4 = item is representative	1 = item is not clear 2 = item needs major revisions to be clear 3 = item needs mnor revisions to be clear 4 = item is clear

		Please rate from 1 - 4	Please rate from 1 - 4
1.	Our mission is used to monitor performance		
2.	Our mission is used to make decisions		
3.	I understand how my job helps to achieve our mission		
4.	Our mission statement helps me to understand how my organisation sets priorities		
5.	Strategy is important to our mission		
6.	Our strategy is achievable		
7.	My day to day duties help us to achieve our mission		
8.	My co-workers day to day duties helps us to achieve our mission		
9.	Our mission is the driving force for this organisation		
10.	Our organisation's actions are consistent with our mission		
11.	Our organisation's action are consistent with our vision		
12.	Our organisation's actions are consistent with our core values		
13.	We consistently meet the foundation for performance established in our mission statement		
14.	We consistently meet the criteria for performance established in our vision statement		
15.	We consistently meet the criteria for performance established in our values statement		
16.	Our leaderskeep reminding us and continue to talk about our mission.		
17.	The message constantly being disseminated to make people understand the organisation's mission.		
18.	We have a collective effort to achieve a mission of the organisations.		
19.	Our organisations used the right media to communicate the organisation's mission.		
20.	Our mission is very clearly stated and everybody know how to achieve it.		

Comments on items (Please specify the item):		
Overall comments of the entire measure by either adding or deleting		

Appendix 4. 7: Questionnaire for main survey



INVESTIGATING THE ANTECEDENTS AND CONSEQUENCES OF CORPORATE COMMUNICATION MANAGEMENT (CCM)

Research developed at Brunel University, West London (United Kingdom) and Universiti Utara Malaysia, Sintok (Malaysia)

RESEARCH OBJECTIVE

This research aims to explore the determinants of corporate communication management (CCM) and the impact of CCM on the organisational performance.

This questionnaire aims to collect data on level of corporate communication management (CCM), corporate culture, ICT diffusion innovation, corporate leadership and mission achievement of Malaysian organisations.

CONFIDENTIALITY

The information you provide will be kept strictly confidential:

The data will be used for statistical purposes only and released in aggregated form. No single name will be disclosed.

YOUR KIND CO-OPERATIONS IS ESSENTIAL

The success of this national investigation depends entirely on the data contributed by corporate communication and PR practitioners such as you.

ADVANDTAGE FOR YOU AS A CORPORATE COMMUNICATION AND PR PRACTITIONERS

The aggregated data contributed by research participants will be used to suggest on possible areas of corporate communication improvement and efficiency. This will make the role of corporate communication and PR more visible and getting recognised by the top management.

Thank you for your co-operation,

Bahtiar Mohamad

PhD Researcher
Brunel Business School

If you require more information about the questionnaire, please contact:

Bahtiar Mohamad, Ph.D Researcher, Room 356, Michael Sterling Building, Brunel Business School, Brunel University, West London, UB8 3PH, Uxbridge, United Kingdom

Telephone: +44 (0)1895267263 Mobile: +44(0)7532072703 Email: Bahtiar. Mohamad@brunel.ac.uk

HOW TO FILL IN THE QUESTIONAIRE

- 1. There is no right or wrong answer to this questionaire. What is important is your opinion on specific aspect of your organisation. Just tick (v) the option that best represents your opinion.
- 2. This questionnaire is structured so that its completion will be easy and quick. It will take <u>approximately 15 minutes</u> to complete.
- 3. This questionaire consist of 6 sections. Questions in Section A and B ask you about your demographical and other data, whereas Section C to G are concerned with your personal opinion about specific dimensions of your organisation.

		SECTION A: COMPA	NY BACKGROUND	
nstı	ruction: P	lease tick (v) the appropriate box.		
1.	Please 0 1 2 3 4 5 6	describe your organisation type? Public-Listed Companies (PLC) Subsidiary of Public-Listed Companies (PLC's Private Limited Companies (Pte Ltd) Government Agencies Non-Government Organisations (NGO's) Others (please specify):	s Subsidiary)	
2.	Describe 1	e your organisation sectors: Consumer Products Industrial Products Construction Trading / Services Technology Infrastructure Project Companies (IPC) Finance Hotels	9 Properties 10 Plantations 11 Mining 12 Real Estate Investment Trust (REIT 13 Trust 14 Closed-End Fund 15 Others (please specify):	ΓS)
3.	How lor 1 2 3 4	ng has your company been established? Less than 4 years 4-8 years 8-12 years More than 12 years		
4.	Please i 1	ndicate the total number of employees in you 100 or less 101-300 301-500 501-700 701-900 More than 900	r organisation.	

SECTION B: RESPONDENT INFORMATION

Instruction: Please tick (\forall) the appropriate box.

1.	Your current age (years) Less than 30 31-40 41-50 More than 51
2.	Gender 1 Male 2 Female
3.	Job position 1
4.	Your highest level of education: 1 SPM/STPM 2 Diploma 3 Degree 4 Masters 5 PhD 6 Other (please specify):
5.	Number of years worked with the company 1 less than 5 2 5-10 3 11-15 4 more than 15
6.	Number of years in present position 1 less than 2 2 2-4 3 4-6 4 more than 6

SECTION C: CORPORATE COMMUNICATION MANAGEMENT (CCM)

Below are statements about the corporate communication management (CCM) where you are working for. Please respond based on your agreement or disagreement based on the scores from '1' to '5' as shown below. Please tick (V) as appropriate.

1=Strongly Disagree		2 = Not Agree	3=Neither 'Agree' nor 'Not Agree'	4= Agree		5=Stro	ngly A	√gree	
1.	_	dvertisements, marke e company's brand po	eting and promotion (AMP) ositioning.	1	2	3	4	5	
2.	We are responsibl or typography) for		rate visual identity (e.g. logo	o, slogan 1	2	3	4	5	
3.	We involved in coadvertisement ma	•	f corporate advertising and	other 1	2	3	4	5	
4.		le to produce publica any profile and corpo	tions for the company (e.g. rate brochures).	1	2	3	4	5	
5.	-	·	bilities (e.g. sponsorship, ch olders engagement and	narities 1	2	3	4	5	
6.	electronic press re	eleases and corporate	ublication (e.g. e-newsletter website) for our company.	1	2	3	4	5	
7.	-	h) to keep board mer	eness campaign, trade exhi mbers and employees enga		2	3	4	5	
8.		s speech writing, trar s important documer	nslations and documentationts.	n 1	2	3	4	5	
9.	We organise med build a relationshi		media night or golf with me	dia) to	2	3	4	5	
10.	We are responsibl at any time.	e to address media n	eeds and concerns professi	onally 1	2	3	4	5	
11.	We are responsibl	e for press release an	nd media conferences.	1	2	3	4	5	
12.			o organise annual general n annual financial results to t	_	2	3	4	5	
13.	We work closely w quarterly financial		ent to prepare annual repor	t and 1	2	3	4	5	
14.		rogramme (e.g. inves	relationship with the invest tor relations programme an		2	3	4	5	
15.		ve context and bette formance of the comp	r perspective on financial da pany.	ata to 1	2	3	4	5	
16.			to the public and understa est level to build internal bra		2	3	4	5	
17.	·	ng a particular crisis (i	nmunication within the .e. sales drop, economic do	wn turn 1	2	3	4	5	
18.	We assist the HR t	o explain key initiativ	e the company is taking an	d 1	2	3	4	5	

manage change on regular basis through dialogue in the organisation.

SECTION D: CORPORATE CULTURE

The statements below are designed to capture your opinion on your organisation's corporate culture. Please select the response that most closely represents your opinion concerning corporate culture. Please indicate your level of agreement with each statement with (1) being strongly disagree and (5) strongly agree. Please tick (V) as appropriate.

	1=Strongly Disagree 2 = Not Agree 3=Neither 'Agree' nor 'Not Agree' 4= Agree						5=Stron	gly Ag	ree
1.		on is a very personal postage of them.	place. It is like an extended selves.	family.	1	2	3	4	5
2.	The head of m or a father or r		erally considered to be a m	entor, sage,	1	2	3	4	5
3.		nolds my organisation to this firm runs high.	n together is loyalty and tra	dition.	1	2	3	4	5
4.	My organisation in the firm are	The state of the s	n resources. High cohesion	and morale	1	2	3	4	5
5.		on is a very dynamic a their necks out and t	and entrepreneurial place. Frake risks.	People are	1	2	3	4	5
6.		y organisation is general and innovator, or a r	erally considered to be an isk taker.		1	2	3	4	5
7.	-		n together is a commitment s an emphasis on being firs		1	2	3	4	5
8.	, ,	on emphasizes growt neet new challenges	h and acquiring new resour is important	ces.	1	2	3	4	5
9.	, ,	on is a very formalized nerally govern what p	d and structural place. Estal people do.	blished	1	2	3	4	5
10.		y organisation is gene n administrator	erally considered to be coo	rdinator, an	1	2	3	4	5
11.	-		n together is formal rules ar tution is important here.	nd policies.	1	2	3	4	5
12.	My organisation operations are		nence and stability. Efficier	nt, smooth	1	2	3	4	5
13.			oriented. A major concern personal involvement.	is with	1	2	3	4	5
14.	The head of m	The head of my organisation is generally considered to be a producer, a technician, or a hard-driver.				2	3	4	5
15.	-	The glue that holds my organisation together is the emphasis on tasks and goal accomplishment. A production orientation is commonly shared.					3	4	5
16.		on emphasizes compe pals are important.	etitive actions and achieven	nent.	1	2	3	4	5

SECTION E: ICT INNOVATION DIFFUSION

The statements below are designed to capture your opinion on your organisation's ICT innovation diffusion. Please select the response that most closely represents your opinion concerning ICT innovation diffusion. Please indicate your level of agreement with each statement with (1) being strongly disagree and (5) strongly agree. Please tick (V) as appropriate.

	1=Strongly Disagree	2 = Not Agree	3=Neither 'Agree' nor 'Not Agree'	4= A	gree		5=Stro	ngly A	gree
1.	I am given suff that I am expe	1	2	3	4	5			
2.	I am given eno use here	ugh time to learn abou	it the ICT tools that I am ex	pected to	1	2	3	4	5
3.	daily demands	_ , , , ,	b demands (in terms of reson) to learn how to apply IC	_	1	2	3	4	5
4.	Our work proc expected to us	• • • • • • • • • • • • • • • • • • • •	pacity to use ICT tools that	l am	1	2	3	4	5
5.	~	ational) to allow me to	ufficient (e.g., help desk, an learn about and apply ICT t		1	2	3	4	5
6.	• .	•	ow me to learn about and the ICT tools that I am expe	ected to	1	2	3	4	5
7.	The result/ben		hat I am expected to use he	ere were	1	2	3	4	5
8.	-	supervisor encourage expected to use here	s me to learn about and/or	apply ICT	1	2	3	4	5
9.	I enjoy learning expected to us	-	pplying ICT tools that we are	9	1	2	3	4	5
10.	My immediate	supervisor in my orga	nisation is open to suggesti I am expected to use here		1	2	3	4	5
11.		on supports our ability	to share experience of ICT		1	2	3	4	5
12.	The managem	ent is very supportive a	and understand that ICT car make our work better.	n help	1	2	3	4	5
13.	Our organisation) to those w	Dusiness become more efficient and make our work better. Dur organisation provides tangible rewards (bonus, promotion, and so on) to those who share ideas and experience about ICT tools that I am expected to use here						4	5
14.	public praise) t	,	rewards (recognition, than as and experience about IC		1	2	3	4	5
15.	I receive intang	gible rewards (respect,	admiration, self fulfillment ols that we are expected to		1	2	3	4	5

SECTION F: CORPORATE LEADERSHIP

The statements below are designed to capture your opinion on your organisation's corporate leadership. How well do you think your immediate boss/supervisor in your company has performed? Please indicate your level of agreement with each statement with (1) being strongly disagree and (5) strongly agree. Please tick (\vee) as appropriate.

	1=Strongly Disagree 2 = Not Agree 3=Neither 'Agree' nor 'Not Agree' 4= Agree		е	5	=Stron	5=Strongly Agree			
1.	He/she makes	He/she makes me feel good to be around him/her. 1 2 3 4 5							
2.	I have complet	e faith in him/her.			1	2	3	4	5
3.	I am proud to I	be associated with him	/her.		1	2	3	4	5
4.	He/she expres	ses with a few simple v	words what I could and sh	ould do.	1	2	3	4	5
5.	He/she provide	es appealing images ab	out what I can do.		1	2	3	4	5
6.	He/she helps n	ne find meaning in my	work.		1	2	3	4	5
7.	He/she enable	s me to think about old	d problems in new ways.		1	2	3	4	5
8.	He/she provide	es me with new ways o	of looking at puzzling thing	gs.	1	2	3	4	5
9.	He/she gets m	e to rethink ideas that	I had never questioned be	efore.	1	2	3	4	5
10.	He/she helps n	ne to develop myself.			1	2	3	4	5
11.	He/she lets me	know how he/she thi	nks I am doing.		1	2	3	4	5
12.	He/she gives p	ersonal attention to ot	thers who seem rejected.		1	2	3	4	5
13.	He/she is very	transparent and consis	stent with his/her decision	າ.	1	2	3	4	5
14.	He/she is alwa	He/she is always able to deliver his/her promise. 1					3	4	5
15.	He/she give m	He/she give me freedom to accomplish my work successfully.				2	3	4	5
16.	He/she willing issues.	to meet the staff if the	ey need clarification on ce	rtain	1	2	3	4	5

SECTION G: MISSION ACHIEVEMENT

Below are statements to access your opinion as it relates to your organisation's effectiveness at achieving its mission. Please respond to the following statements based on upon your view of organisation's mission statement and mission achivement over the past operating year based on the scores from '1' to '5'? Please tick (V) as appropriate.

	=Strongly Disagree	2 = Not Agree	3=Neither 'Agree' nor 'Not Agree'	4= Agr	ee		5=Strongly A		gree	
1.	Our mission i	Our mission is used to monitor performance							5	
2.	Our mission i	s used to make decision	IS		1	2	3	4	5	
3.	I understand	how my job helps to acl	hieve our mission		1	2	3	4	5	
4.	Our mission s priorities	statement helps me to u	inderstand how my organ	sation sets	1	2	3	4	5	
5.	Strategy is im	portant to our mission			1	2	3	4	5	
6.	Our strategy	is achievable			1	2	3	4	5	
7.	My day to da	y duties help us to achie	eve our mission		1	2	3	4	5	
8.	My co-worke	rs day to day duties help	ps us to achieve our mission	on	1	2	3	4	5	
9.	Our mission i	s the driving force for th	nis organisation		1	2	3	4	5	
10.	Our organisa	tion's actions are consis	tent with our mission		1	2	3	4	5	
11.	Our organisa	tion's action are consist	ent with our vision		1	2	3	4	5	
12.	Our organisa	tion's actions are consis	tent with our core values		1	2	3	4	5	
13.	We consister mission state	•	n for performance establis	hed in our	1	2	3	4	5	
14.	We consister vision statem	· ·	performance established	in our	1	2	3	4	5	
15.	We consister values staten	•	performance established	in our	1	2	3	4	5	
16.	Our leaders k	keep reminding us and c	ontinue to talk about our	mission.	1	2	3	4	5	
17.	_	Our organisations used the right media to communicate the organisation's mission.						4	5	
18.	Our mission i	s very clearly stated and	d everybody know how to	achieve it.	1	2	3	4	5	

[~] THANK YOU FOR YOUR KIND COOPERATION ~

Appendix 5. 1 : Testing for Homoscedasticity

	Appendix 3. 1.	resting to		iasticity
	Levene Statistic	df1	df2	Sig.
CCM03	.339	1	221	.561
CCM04	.510	1	221	.476
CCM05	.910	1	221	.341
CCM11	2.247	1	221	.135
CCM13	2.501	1	221	.115
CCM14	.793	1	221	.374
CCM14 CCM16		1		
CCM16	2.959		221	.087
	.155	1	221	.694
CCM19	2.399	1	221	.123
CCM21	1.004	1	221	.318
CCM23	.573	1	221	.450
CCM24	.681	1	221	.410
CCM26	.335	1	221	.563
CCM27	2.364	1	221	.126
CCM28	5.453	1	221	.020
CCM29	.000	1	221	.995
CCM30	2.431	1	221	.120
CCM31	1.312	1	221	.253
CC01	.022	1	221	.882
CC02	3.376	1	221	.068
CC03	.172	1	221	.678
CC04	5.028	1	221	.026
CC06	.165	1	221	.685
CC07	3.358	1	221	.068
CC08	1.352	1	221	.246
CC09	.000	1	221	.996
CC11	.851	1	221	.357
CC12	.180	1	221	.672
CC13	.856	1	221	.356
CC14	2.981	1	221	.086
CC16	4.071	1	221	.045
CC17	1.714	1	221	.192
CC18	.019	1	221	.889
CC19	.268	1	221	.605
ICT02	2.448	1	221	.119
ICT03	.804	1	221	.371
ICT04	.003	1	221	.960
ICT05	.845	1	221	.359
ICT07	.168	1	221	.682
ICT08	.010	1	221	.922
ICT10	1.024	1	221	.313
ICT12	.576	1	221	.449
ICT13	3.784	1	221	.053
ICT15	.054	1	221	.816
ICT16	6.291	1	221	.013

ICT18	1.218	1	221	.271
ICT20	3.789	1	221	.053
ICT21	8.149	1	221	.005
ICT23	3.270	1	221	.072
CL01	.374	1	221	.542
CL02	.375	1	221	.541
CL03	1.049	1	221	.307
CL04	1.616	1	221	.205
CL05	.175	1	221	.676
CL06	.224	1	221	.636
CL07	.403	1	221	.526
CL08	.287	1	221	.593
CL09	2.047	1	221	.154
CL10	4.069	1	221	.045
CL11	4.573	1	221	.034
CL12	1.035	1	221	.310
CL16	4.735	1	221	.031
CL17	5.745	1	221	.017
CL18	.633	1	221	.427
CL19	.111	1	221	.739
MA01	.271	1	221	.603
MA02	.536	1	221	.465
MA03	.089	1	221	.765
MA04	.006	1	221	.938
MA05	1.577	1	221	.210
MA06	.285	1	221	.594
MA07	.096	1	221	.757
MA08	.435	1	221	.510
MA09	.477	1	221	.491
MA10	.256	1	221	.613
MA11	.842	1	221	.360
MA12	1.395	1	221	.239
MA13	.223	1	221	.638
MA14	.253	1	221	.615
MA15	.251	1	221	.617
MA16	.142	1	221	.707
MA19	.149	1	221	.700
MA20	.114	1	221	.736

 $Appendix\ 5.\ 2: Coefficients (a)-Multicollinearity$

Model			dardized ficients	Standardized Coefficients	t	Sig.	Collinearity	Statistics
		В	Std. Error	Beta	Tolerance	VIF	Tolerance	VIF
1	(Constant)	164	.111		-1.472	.142		
	CCM04	.110	.092	.111	1.195	.233	.060	16.763
	CCM05	066	.042	066	-1.565	.119	.287	3.484
	CCM11	.130	.046	.121	2.798	.006	.278	3.598
	CCM13	.042	.053	.039	.778	.438	.208	4.810
	CCM14	.022	.049	.022	.449	.654	.209	4.784
	CCM16	.056	.054	.056	1.032	.304	.179	5.598
	CCM18	.031	.063	.029	.487	.627	.142	7.048
	CCM19	035	.056	035	637	.525	.167	5.970
	CCM21	173	.081	159	-2.129	.034	.093	10.716
	CCM23	.038	.089	.038	.422	.674	.065	15.395
	CCM24	.023	.052	.023	.432	.666	.187	5.347
	CCM26	.038	.056	.037	.683	.495	.172	5.810
	CCM27	.029	.060	.029	.488	.626	.149	6.716
	CCM28	124	.056	114	-2.230	.027	.200	5.009
	CCM29	.690	.050	.658	13.827	.000	.229	4.372
	CCM30	.068	.046	.067	1.490	.138	.259	3.854
	CCM31	.165	.080	.155	2.054	.041	.091	11.028
	CC01	027	.086	026	312	.755	.369	2.712
	CC02	181	.103	175	-1.766	.079	.268	3.738
	CC03	008	.116	008	069	.945	.215	4.649
	CC04	146	.107	148	-1.361	.175	.223	4.490
	CC06	196	.111	194	-1.764	.079	.217	4.608
	CC07	.298	.104	.299	2.858	.005	.241	4.150
	CC08	.065	.134	.063	.484	.629	.156	6.426
	CC09	.344	.147	.342	2.340	.020	.124	8.092
	CC11	.092	.090	.097	1.020	.309	.292	3.423
	CC12	.149	.085	.155	1.752	.081	.338	2.959
	CC13	.109	.089	.114	1.232	.219	.307	3.258
	CC14	046	.103	051	446	.656	.206	4.865
	CC16	062	.097	064	632	.528	.259	3.863
	CC17	.059	.116	.060	.506	.613	.188	5.306
	CC18	.090	.156	.087	.576	.565	.114	8.745
	CC19	.166	.149	.161	1.114	.266	.126	7.958
	ICT02	361	.188	369	-1.919	.056	.066	15.207
	ICT03	108	.096	113	-1.131	.259	.245	4.090
	ICT04	027	.101	028	269	.788	.228	4.382
	ICT05	150	.146	157	-1.027	.305	.104	9.610
	ICT07	.263	.115	.295	2.276	.024	.144	6.938
	ICT08	.404	.118	.424	3.428	.001	.159	6.292
	ICT10	109	.132	112	827	.409	.132	7.572
	ICT12	058	.096	063	602	.548	.223	4.477
	ICT13	142	.124	148	-1.142	.255	.145	6.888

ICT15	076	.116	074	655	.513	.189	5.280
ICT16	.127	.111	.129	1.137	.257	.188	5.320
ICT18	.445	.085	.456	5.254	.000	.322	3.105
ICT20	.135	.125	.136	1.079	.282	.153	6.549
ICT21	048	.089	046	533	.595	.320	3.126
ICT23	.370	.185	.381	1.996	.047	.067	14.986
CL01	073	.122	077	594	.553	.183	5.479
CL02	147	.165	147	890	.375	.112	8.962
CL03	103	.189	102	544	.587	.086	11.623
CL04	.387	.123	.395	3.137	.002	.191	5.235
CL05	.198	.154	.186	1.286	.200	.145	6.875
CL06	007	.143	007	047	.962	.153	6.547
CL07	029	.145	029	199	.843	.144	6.947
CL08	.209	.158	.218	1.328	.186	.112	8.906
CL09	.027	.180	.027	.151	.880	.096	10.468
CL10	.274	.127	.265	2.166	.031	.202	4.941
CL11	012	.131	011	095	.925	.211	4.735
CL12	.044	.119	.045	.367	.714	.204	4.912
CL16	028	.108	028	262	.794	.263	3.801
CL17	130	.100	132	-1.298	.196	.294	3.406
CL18	.178	.160	.161	1.109	.269	.145	6.917
CL19	152	.157	137	973	.332	.153	6.518
MA01	.398	.152	.373	2.622	.009	.143	7.009
MA02	200	.158	188	-1.267	.207	.131	7.649
MA03	.090	.149	.086	.603	.547	.142	7.024
MA04	182	.162	168	-1.123	.263	.129	7.751
MA05	101	.166	095	607	.545	.118	8.448
MA06	138	.160	132	866	.387	.124	8.040
MA07	.259	.183	.246	1.421	.157	.097	10.321
MA08	.260	.183	.246	1.418	.158	.096	10.429
MA09	.103	.159	.095	.648	.517	.135	7.405
MA10	.021	.207	.019	.099	.921	.081	12.394
MA11	.228	.208	.208	1.096	.274	.080	12.488
MA12	.377	.210	.352	1.794	.074	.075	13.319
MA13	393	.260	358	-1.509	.133	.051	19.439
MA14	300	.288	277	-1.041	.299	.041	24.451
MA15	.071	.167	.068	.423	.673	.113	8.821
MA16	042	.115	040	361	.718	.238	4.196
MA19	.314	.123	.293	2.561	.011	.220	4.538
MA20	089	.141	080	628	.530	.177	5.659

a Dependent Variable: CCM03

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion Innovation, LDR = Corporate Leadership, MA = Mission Achievement

Appendix 5. 3 : Total variance explained

Componen t	ī	nitial Eigenva	lues		Extraction Sums of Squared Loadings		Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulative %
1	39.175	57.610	57.610	39.175	57.610	57.610	11.777	17.319	17.319
2	4.923	7.240	64.850	4.923	7.240	64.850	11.203	16.475	33.794
3	3.801	5.589	70.439	3.801	5.589	70.439	10.946	16.097	49.891
4	2.519	3.704	74.143	2.519	3.704	74.143	10.611	15.604	65.496
5	1.974	2.902	77.046	1.974	2.902	77.046	7.837	11.525	77.020
6	1.069	1.572	78.618	1.069	1.572	78.618	1.086	1.598	78.618
7	.969	1.424	80.042						
8	.851	1.252	81.294						
9	.767	1.129	82.423						
10	.711	1.046	83.469						
11	.650	.955	84.424						
12	.572	.842	85.266						
13	.546	.802	86.068						
14	.520	.765	86.833						
15	.483	.711	87.544						
16	.464	.682	88.225						
17	.450	.661	88.887						
18	.417	.613	89.500						
19	.395	.580	90.080						
20	.366	.538	90.618						
21	.358	.527	91.145						
22	.336	.494	91.639						
23	.329	.483	92.123						
24	.318	.468	92.591						
25	.299	.440	93.031						
26	.278	.409	93.440						
27	.274	.404	93.843						
28	.256	.376	94.219						
29	.242	.355	94.574						
30	.229	.337	94.911						
31	.211	.310	95.221						
32 33	.199	.292	95.513						
	.191	.281	95.794						
34 35	.180	.264	96.058						
36	.172	.253	96.311						
37	.167	.246	96.557						
38	.160	.236	96.793						
39	.152	.224	97.017						
40	.145	.213 .195	97.230						
41	.133	.195	97.425 97.614						
42	.128								
43	.118	.174 .163	97.788						
44	.111		97.951						
77	.105	.154	98.105						

		i	
45	.102	.150	98.255
46	.098	.143	98.399
47	.090	.132	98.531
48	.088	.129	98.660
49	.082	.120	98.780
50	.075	.111	98.891
51	.072	.106	98.997
52	.069	.102	99.099
53	.066	.097	99.196
54	.061	.090	99.286
55	.056	.082	99.368
56	.051	.075	99.443
57	.047	.070	99.513
58	.043	.064	99.577
59	.041	.061	99.637
60	.039	.057	99.694
61	.036	.054	99.747
62	.032	.047	99.795
63	.029	.043	99.838
64	.027	.039	99.878
65	.024	.036	99.913
66	.023	.034	99.947
67	.021	.031	99.978
68	.015	.022	100.000

Extraction Method: Principal Component Analysis.

Appendix 5. 4: Factor loading

Variable -	1		ppendix 5. 4		
Variables CCM03	.758	2	3	4	5
CCM05	.738 .748				
CCM11	.748 .744				
CCM13	.705				
CCM14	.703				
CCM16	.721				
CCM18	.805				
CCM19	.759				
CCM24	.775				
CCM26	.749				
CCM27	.747				
CCM28	.734				
CCM29	.738				
CCM30	.686				
CC01	.000	.629			
CC02		.684			
CC03		.728			
CC04		.693			
CC06		.726			
CC07		.623			
CC08		.694			
CC09		.703			
CC11		.636			
CC12		.628			
CC13		.656			
CC14		.679			
CC16		.670			
CC17		.671			
CC18		.627			
CC19		.652			
ICT03			.704		
ICT04			.730		
ICT05			.862		
ICT07			.851		
ICT08			.740		
ICT10			.831		
ICT12			.852		
ICT13			.835		
ICT15			.776		
ICT16			.820		
ICT18			.697		
ICT20			.769		
ICT21			.701		
CL01				.720	

CL02	.738
CL04	.612
CL05	.730
CL06	.762
CL07	.720
CL08	.748
CL10	.711
CL11	.697
CL12	.738
CL16	.698
CL17	.683
CL18	.598
CL19	.604
MA01	.667
MA02	.625
MA03	.660
MA04	.718
MA05	.666
MA06	.619
MA09	.695
MA15	.658
MA16	.676
MA19	.617
MA20	.658
Establish Mathada Dainainal Commonant Analysis	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Note: CCM = Corporate Communication Management; CC = Corporate Culture, ICT = ICT Diffusion Innovation, LDR = Corporate Leadership, MA = Mission Achievement

a Rotation converged in 7 iterations.