

International Marketing Capabilities in the Digital Age: The Role of Social Media Technologies and Firm Cultural Intelligence

قدرات التسويق الدولي في العهد الرقمي: دور تقنيات وسائل التواصل الاجتماعي
والذكاء الثقافي للمؤسسة

by

JOE HAZZAM

**A thesis submitted in fulfilment
of the requirements for the degree of
DOCTOR OF PHILOSOPHY IN BUSINESS MANAGEMENT
at
The British University in Dubai**

June 2020



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Abstract

The marketing literature suggests that marketing capabilities are essential drivers of multinational organisations' performance in foreign markets. Yet, the literature also indicates that cultural barriers represent significant challenges for the marketing department to develop international marketing capabilities that create value for foreign stakeholders. These challenges are even augmented by the emergence of social media platforms and the fast changes in the way consumers and firms communicate.

Previous studies highlighted the role of marketing capabilities in explaining firms' performance in international markets. However, little is known about the specific drivers of international marketing capabilities in digital and social media marketing and how it differs from a domestic market. In this research, the marketing capabilities and strategic management literature were used to develop a new conceptualisation of the drivers of international marketing capabilities. The thesis investigates the impact of firm cultural intelligence and social media technologies on the development of international marketing capabilities in the context of multinational enterprises that established regional offices to manage their marketing operations in foreign markets.

Results explain that firm cultural intelligence and social media technologies have unique and complementary contributions to the development of international marketing capabilities, and these capabilities play an essential role in firm performance by lessening the adverse effects of foreign market turbulence.

This thesis offers a new conceptualisation to the drivers of international marketing capabilities by identifying two distinct resources that have unique and complementary contributions to the development of international marketing capabilities. The firm cultural intelligence and social media technologies significantly impact the development of international marketing capabilities and might be incorporated into future MNEs' international marketing research. The research implies that regional marketing managers should build specific processes that embed the cultural factors of their stakeholders and their regional operating markets. These culturally intelligent processes and structures contribute to the development of marketing capabilities and complement other firm's resources, such as social media technologies.

ملخص

تُفيد الأدبيات المختلفة في علم التسويق بأن الإمكانيات التسويقية بالنسبة للشركات المتعددة الجنسيات تعتبر محفزات للأداء في الأسواق الأجنبية، ولكن في نفس الوقت توضح هذه الأدبيات أيضا بأن العوائق الثقافية تطرح تحديات هامة لأقسام التسويق لتطوير قدرات تسويق ذات طابع دولي من شأنها خلق قيمة مضافة لأصحاب المصالح الأجانب، وتزداد أهمية هذه القيمة مع الإنتشار الواسع لمنصات التواصل الاجتماعي والتغيرات المتسارعة في الأساليب التي يتواصل بها العملاء والشركات.

بالرغم من أن الدراسات السابقة أكدت على دور الإمكانيات التسويقية في تفسير أداء الأسواق العالمية، إلا أنه كان هناك القليل فقط مما نعرفه عن الدوافع والمحفزات المحددة للقدرات التسويقية الدولية في وسائل التواصل الاجتماعي والرقمي وكيف تختلف عن نظيراتها المحلية. لقد راجع البحث الأدبيات المختلفة التي تتناول الإمكانيات التسويقية والإدارة الإستراتيجية لتطوير مفاهيم عن الدوافع أو المحفزات الجديدة للإمكانيات التسويقية العالمية. فقد ناقشت الأطروحة أثر الذكاء الثقافي وتقنيات التواصل الاجتماعي على تطوير وتنمية الإمكانيات التسويقية الدولية في سياق الشركات المتعددة الجنسيات التي قامت بفتح مكاتب إقليمية لإدارة عملياتها التسويقية في الأسواق الأجنبية.

بيّنت تلك النتائج أن الذكاء الثقافي للشركة وتقنيات التواصل الاجتماعي لها خاصية تكاملية فريدة في الإسهام في تطوير الإمكانيات التسويقية العالمية وأن هذه الإمكانيات تلعب دورا أساسيا في أداء الشركة عن طريق تقليل الآثار السيئة للتحولات في الأسواق الأجنبية.

تكشف هذه الأطروحة مفاهيم جديدة للمحفزات والدوافع التي تكمن وراء الإمكانيات التسويقية العالمية بواسطة تعريفها لمصدرين مميزين لهما مساهمات مكملة في تطوير الإمكانيات التسويقية في الأسواق الأجنبية، ألا وهما ذكاء الشركة الثقافي وتقنيات التواصل الاجتماعي اللذان لهما أثر كبير في تطوير هذه الإمكانيات التسويقية وتستحقان تضمينهما في الأبحاث التسويقية المستقبلية للشركات المتعددة الجنسيات. وأيضا يشير البحث ضمنا بأن مدراء التسويق الإقليميين عليهم أن يأسسوا لعمليات إجرائية محددة

تُؤام بين العوامل الثقافية لأصحاب المصالح والأسواق الإقليمية التي يعملون بها. أيضا تعتبر هذه العمليات الإجرائية الذكية ثقافيا جزءا هاما يساهم في تطوير الإمكانيات التسويقية ويرفد المصادر الأخرى للشركة مثل تقنيات التواصل الإجتماعي.

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List of abbreviations

AGFI	Adjusted Goodness-of-Fit Indices (AGFI)
AMC	Adaptive Marketing Capabilities
AMOS	Analysis of moment structures
AVE	Average Extracted Variance
χ^2	Chi-square
CFI	Comparative Fit Index
CFA	Confirmatory Factor Analysis
CR	Construct Reliability
CQ	Culture Intelligence
CMIN	Chi-square
CMIN/DF	Normed chi-square
CRM	Customer Relationship Management
DC	Dynamic Capabilities
DMC	Dynamic Marketing Capabilities
EFA	Exploratory Factor Analysis
ET	Environmental Turbulence
FCI	Firm Cultural Intelligence
IMC	International Marketing Capabilities
MC	Marketing Capabilities
MNEs	Multinational Enterprises

MP	Market Performance
TLI	Non-normed Fit Index
χ^2/df	Relative/normed chi-square
RMSEA	Root Mean Square of Approximation
SEM	Structural Equation Modeling
SMC	Static Marketing Capabilities
SMT	Social Media Technologies
SRMR	Standardized root mean residual
UAE	United Arab Emirates
WOM	Word of Mouth

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter describes the study context and background of the thesis. It also explains the research problem statement, research questions, aims, and objectives. This chapter underlines as well the hypotheses, research methodology, and research novelty and contribution.

1.2 Research Context and Background

The marketing paradigm shifts under the influence of service and relationships. The role of the customers becomes prominent for value creation. Firm management of information, analytics, and relations with their customers represent a critical capability for success and competitive advantage in the digital age. Customers are of central focus, and effective management of direct interaction highlights an opportunity for organisations to engage and facilitate the process of value creation and, ultimately, firm performance. (Vargo & Lusch 2004; Grönroos 2011; Grönroos & Voima 2012).

The evolution of web 2.0 applications and the emergence of social media platforms highlight a new era of firms' interactions and relationships with international customers (Berthon et al. 2012). Online communications are growing as a result of a change in behaviours. Consumers today are highly exposed to digital and social media platforms, and they use the online mediums for information search, evaluation of offerings, and for communication of their experiences either with their friends, communities, or with their preferred companies (Stephen 2016). These customers interact with firms through multiple touchpoints in various channels and media, and the experiences are becoming more social in this digital

age (Lemon & Verhoef 2016). Furthermore, social media platforms influence consumer behaviours and purchasing habits. According to Lindsey-Mullikin and Borin (2017), the effect of social media on the decision-making process explains a shorter phase between consumer consideration and the evaluation of products compared to the traditional media. These online platforms predict a higher purchase rate as a result of online reviews, the number of votes for the reviewers, and the picture of the products (Hou et al. 2017).

Social media facilitates information access, content receipt, creation, and sharing. The impact of online platforms is not only changing the individual level of communication and interaction. Also, business operations are influenced by the arrival of social media (Ngai, Tao & Moon 2015). For example, Kumar et al. (2016) conclude useful positive communication through firm-generated content in social media on consumer valence, receptivity, and susceptibility. Whereas, Batra and Keller (2016) highlight the challenge of digital media integration along with traditional channels and suggest the development of new capabilities to overcome the complexities of a new communication environment.

Social media has a global reach and supports multinational enterprises' (MNEs) communication and relationships with international customers and the acquisition of data from different foreign markets. The communication is faster, frequent, and online platforms facilitate cross-cultural interactions and reinforce firm brand image across the world (Okazaki & Taylor 2013). Social media technologies represent an opportunity for the international marketing paradigm. However, the questions of how to integrate these online platforms into firms' resources, and what are the marketing capabilities to leverage these technologies in foreign markets remain a gap in the literature (Moorman & Day 2016). This rapid advance in information technology and the foreignness of international markets underline another challenge for multinational organisations. The complexities of cross-cultural markets are high, and the

proliferation of online platforms increases cross-cultural interactions (Ang & Inkpen 2008; Moon 2010). Thus, MNEs' development of capabilities that consider the fast changes in technology and higher cross-cultural interactions are required to achieve performance in foreign markets.

International marketing capabilities are defined as: "firm's ability to use available resources to understand and fulfill foreign market customer needs better than its rivals and achieve international marketplace goals" (Morgan et al. 2018, p.63). The literature on international marketing capabilities reveals a positive relationship with firm performance (Krasnikov & Jayachandran 2008; Fang & Zou 2009; Kaleka & Morgan 2017). However, the antecedents of marketing capabilities are fragmented. Studies are needed for more in-depth understanding of such capabilities (Tan & Sousa 2015). This gap in the literature is emphasised by Moorman and Day (2016, p.7), who proposed as a future research priority to answer the following question: what is the nature of new capabilities in digital marketing, social media, and marketing analytics?

Day (2011) states that MNEs operating in foreign countries are facing double the challenge since information needs to be collected from different geographic areas. According to Kogut and Zander (2003), MNEs' success in foreign markets is highly related to the efficiency of knowledge transfer across borders. Thus, the response to markets' change with different technology penetration and media access reveals the need for firms to manage effectively cross-cultural interactions. The organisation capable of functioning effectively in diverse situations is defined as "Firm Cultural Intelligence" (Ang & Inkpen 2008). Cultural intelligence on the individual level predicts performance, adaptation, leadership effectiveness, and successful cross-cultural interactions. Whereas, the outcome of culturally intelligent firms needs empirical studies (Ott & Michailova 2016).

Due to the competitive global environment, higher cross-cultural interactions, change in consumer behaviors, and the emergence of social media platforms, multinational firms need to develop new capabilities to achieve higher performance. For example, the fashion retailer Zara can move the new designs to store in just two weeks; therefore, it develops fast sense and response capabilities that serve a broader segment of unpredictable customer needs. In another attempt to adapt to the new marketing environment, Procter and Gamble experiments with an open marketing network approach that could bring new capabilities and insights to the company (Day 2011).

The technological disruptions, and the fast changes in consumer behavior and market dynamics challenge the previous theories of marketing capabilities. Accordingly, there is a gap in the knowledge on how international marketing capabilities are developed in the digital age of social media platforms and firms' higher interactions with international stakeholders. To bridge this gap, this research will assess the relationships between social media technologies, firm cultural intelligence, international marketing capabilities, and performance. Therefore, this study explores the nature of international marketing capabilities through the firms' social media technology usage and cultural intelligence as antecedents and complementary. The thesis investigates the mediation effects of international marketing capabilities on the relationships between social media technologies, firm cultural intelligence, and firm performance. Furthermore, this study examines the contributions of different types of international marketing capabilities on firms' performance under different levels of turbulent environment.

1.3 Research Problem Statement

This research aims to examine the development of international marketing capabilities in MNEs. In a global environment, organisations face the challenges of increased cross-culture interactions, and a shift

of power to highly digital connected consumers induced by social media platforms. Firms start to integrate social media technologies to communicate and build relationships with their global customers. However, the adoption of online platforms should be recombined with other firm resources or abilities such as cultural intelligence to develop newer marketing capabilities in an international cross-cultural context. The study aligns with the argument of Day as an organisations' static marketing mix capabilities and marketing dynamic capabilities might not achieve performance in digital and fast-changing environments. Therefore, firms need to develop other types of capabilities named "adaptive capabilities" to proactively respond to market change and customers' needs (2011).

This research attempts to investigate the nature and development of international marketing capabilities. This perspective is in line with Morgan et al.'s (2018, p.89) conceptual question of whether marketing capabilities in international markets differ fundamentally in nature from a domestic context.

1.4 Research Questions

The purpose of the thesis is to answer the following primary and sub-research questions.

1. What are the drivers of international marketing capabilities in the digital age and higher cross-cultural interactions?
 - 1a. What is the influence of social media technologies on the development of international marketing capabilities?
 - 1b. What is the influence of firm cultural intelligence on the development of international marketing capabilities?
 - 1c. Does the firm cultural intelligence mediate the relationship between social media technologies and international marketing capabilities?

2. Do international marketing capabilities mediate the relationship between social media technologies and firm performance?
3. Do international marketing capabilities mediate the relationship between firm cultural intelligence and firm performance?
4. What is the contribution of different types of marketing capabilities on firm performance under different levels of environmental turbulence?

1.5 Research Aims and Objectives

The research aims to understand the role of social media technologies and firm cultural intelligence in the development of international marketing capabilities and firm performance. The thesis objectives are:

1. To understand the nature of international marketing capabilities in the social media and cross-cultural interactions environment.
2. To investigate the role of social media platforms on the development of international marketing capabilities and firm performance.
3. To understand the influence of organizations' cultural intelligence on the development of international marketing capabilities and to investigate its mediation effect on the relationship between social media technologies and international marketing capabilities.
4. To develop and assess a model representing the antecedents and the outcome of international marketing capabilities.
5. To understand the contributions of different types of marketing capabilities on firm performance in turbulent environmental conditions.

1.6 Research Hypotheses

The research investigates the relationships between seven main constructs. The following hypotheses have been created to accomplish this study.

- H1: Firm cultural intelligence is positively related to static marketing capabilities.
- H2: Firm cultural intelligence is positively related to dynamic marketing capabilities.
- H3: Firm cultural intelligence is positively related to adaptive marketing capabilities.
- H4: Firm social media technologies are positively related to static marketing capabilities.
- H5: Firm social media technologies are positively related to dynamic marketing capabilities.
- H6: Firm social media technologies are positively related to adaptive marketing capabilities.
- H7: Firm social media technologies are positively related to firm cultural intelligence.
- H8: Static marketing capabilities are positively related to firm performance.
- H8a: The relationship between static marketing capabilities and firm performance is weaker when the level of environmental turbulence is high than when it is low.
- H9: Dynamic marketing capabilities are positively related to firm performance.
- H9a: The relationship between dynamic marketing capabilities and firm performance is not moderated by the level of environmental turbulence.
- H10: Adaptive marketing capabilities are positively related to firm performance.
- H10a: The relationship between adaptive marketing capabilities and firm performance is stronger when the level of environmental turbulence is high than when it is low.

1.7 Research Theoretical Perspective

The research adopts the resource-based (Barney 1991) and dynamic capabilities (Teece, Pisano & Shuen 1997) theories to understand the contribution of social media technologies and firm culture intelligence on the development of international marketing capabilities and firms' performance. The resource-based theory posits that firms' resources that are valuable, rare, inimitable, and non-substitutable are the sources of competitive advantage. These resources explain the variation in organisations' performance (Barney 1991). Despite the essential role of resource-based premises in advancing the field of strategic management, this theory failed to explain how firms' resources are deployed in a dynamic environment

and fast changes in consumers' preferences. On the other hand, the dynamic capabilities theory extended the resource-based view and proposed that the effective integration and reconfiguration of firms' resources contribute to the performance in fast-changing and high-velocity markets (Teece, Pisano & Shuen 1997; Eisenhardt and Martin 2000). Strategic marketing scholars used the assumptions of these strategic management theories to define the marketing capabilities broadly as: "complex bundles of skills and collective learning, exercised through organizational processes, that ensure superior coordination of functional activities (Day 1994, p.37)." These marketing capabilities were conceptualised and classified as per their strategic orientations and functions. The static marketing capabilities are grounded in the resource-based view of the organisation and have inside-out orientation, and exploitive function that improves internal processes and routines efficiency, replicability, predictability, and short-term cost reduction. The dynamic marketing capabilities have an exploratory function, and they have implicit inside-out orientation since their actions started initially by an internal firm scanning. These well-defined and planned exploratory activities explain low sensitivity to weak market signals and describe a reactive approach to market changes. On the other hand, adaptive marketing capabilities have an exploratory function and an outside-in orientation. These newer capabilities enable anticipation, fast learning from experimentation, and rapid reconfiguration of resources in a highly complex and volatile market (Day 2011).

Marketing and strategy scholars advanced the field toward a better understanding of competitive advantage and firm performance through the conceptualisation of marketing capabilities in domestic and international markets. The static and dynamic approach to capabilities reveals essential advancement in the field of international marketing theory and practice. The empirical studies grounded in resource-based view and dynamic capabilities advanced our knowledge on how such capabilities are developed and what are the expected outcomes. These theoretical frameworks might serve as a starting point to

understand the nature of marketing capabilities in the presence of social media platforms, consumer power evolution, and higher cross-cultural interactions (Moorman & Day 2016). Additionally, these assumptions might support the thesis to answer the conceptual question of how the development of marketing capabilities differs in international versus the domestic market, and under which conditions these capabilities contribute to firms' performance in foreign markets (Morgan, Feng & Whitley 2018).

1.8 Research Novelty and Contribution

The research has theoretical and practical contributions. The conceptualisation of the driver of international marketing capabilities will be extended through the construct of firm cultural intelligence. Firm cultural intelligence enables and complements other resources such as social media technologies for the development of international marketing capabilities in MNEs. Vorhies (1998) states that the transformation of marketing inputs to outcomes is the combination of marketing employees' intangible abilities and tangible firm resources. Therefore, the study of social media technologies adoption by multinational organisations combined with the firm marketing abilities to manage cross-cultural interactions with their customers extends the body of knowledge on how and when marketing capabilities are developed (Moorman & Day 2016).

The firms' adoption and usage of social media technologies represent an opportunity for active communication and interaction with international stakeholders. Previous literature focused on the direct relationships between social media technologies, marketing capabilities, and firm performance (Tajvidi & Karami 2017; Foltean et al. 2018). This research contributes to the social media marketing literature by investigating its indirect relationship with international marketing capabilities through the mediation effect of firm cultural intelligence.

Day (2011) emphasises the role of static and dynamic capabilities to achieve competitive advantage, and suggests new adaptive capabilities to offset the challenges of new digital environment and highly empowered customers. Guo et al. (2018) conclude in business to business firms that adaptive marketing capabilities are essential to achieve firm performance in a turbulent environment. The study empirically tests these assumptions and investigates the contribution of each type of capabilities on firm performance in global markets and under the moderation influence of environmental turbulence.

The difference in nature between domestic and international marketing capabilities remains unclear (Morgan, Feng & Whitler 2018). The research answers this conceptual question through the impact of firm cultural intelligence on the development of international marketing capabilities, and its mediating role in the relationship between social media technologies and international marketing capabilities.

The individual cultural intelligence concept has been empirically tested in different cross-cultural studies. The construct relates positively to cross-cultural performance, adaptation, and adjustment (Ott & Michailova 2016). Whereas, the firm level of cultural intelligence needs further validation (Ang & Inkpen 2008; Moon 2010; Lima et al. 2016). The research explains the relationship between firm level cultural intelligence and international marketing capabilities; Thus, it extends the body of knowledge from a marketing perspective and international performance context.

Finally, the study has practical implications and argues that social media vendor-driven management perspective and usage by imitation prevent the company from performing in a dynamic and complex environment (Rydén et al. 2015). The research explains the relationships between social media technologies and different types of marketing capabilities, and informs the practitioners' decision-making process on how and when to use the online platforms in international markets. Additionally, it

emphasises the complementary effect of these platforms and firm cultural intelligence as an essential factor to develop international marketing capabilities, and achieve performance in international markets.

1.9 Research Methodology

The study employs a positivist research approach. The researcher aims to make time and context-free generalisations, moreover, the investigator is detached from the world or the phenomenon under study, seeks objectivity, and constructs hypotheses subjected to verification with quantitative methods (Carson et al. 2001; Guba & Lincoln 1994).

The research investigates the development of international marketing capabilities in the digital age and multinational context. The independent variables are social media technologies and firm cultural intelligence, and the dependent variables are international marketing capabilities and firm performance. A cross-sectional survey was sent to a representative sample of marketing practitioners working in business to business and business to consumer MNEs in the United Arab Emirates. The country's economic situation and political safety supported the decision of many international companies to conduct their business in the Arab Gulf and Middle East region through their regional offices' establishment in the United Arab Emirates. The country's 2021 vision is to diversify the economy and transform it into a knowledge base, and MNEs represent one of the drivers for this transformation. The average growth rate of foreign direct investment in the United Arab Emirates is 49% from the year 2000 until 2011 (Mina 2014), and there are more than 100 expatriate's different national cultures that represent 83.02% of the total population (Petersen, Kushwaha & Kumar 2015). Thus, the country's multicultural environment, diversified customers, and market attractiveness enrich the investigation of how

international marketing capabilities are developed through the use of digital platforms and the abilities of culturally intelligent firms.

The questionnaire items and scales are adapted from previous studies. Social media technologies items and scales are adapted from Tafesse and Wien (2018). Firm cultural intelligence is measured through the items and scale suggested by Ang and Inkpen (2008). Static marketing capabilities items and scale are adapted from Zou, Fang and Zhao (2003), and dynamic marketing capabilities items and scale are adapted from Kachouie, Mavondo and Sands (2018). Adaptive marketing capabilities, environmental turbulence, and firm performance items and scales are adapted from Guo et al. (2018).

1.10 Structure of the Thesis

The thesis includes seven chapters:

Chapter 1: presents the introduction, the line of argument, aim, and objectives of the research. The importance, novelty, and contribution are discussed as well in this chapter

Chapter 2: traces the cultural intelligence theoretical development from the individual level to the firm level. The chapter discusses scales and items development in recent literature and how it relates to the international marketing paradigm. Also, it focuses on reviewing social media technologies concepts and discusses the theoretical development of the concept and outcomes of its integration from an international marketing perspective. Moreover, this chapter reviews the literature, theoretical background, and empirical studies of international marketing capabilities construct and how it relates to firm performance.

Chapter 3: presents the research conceptual model. The chapter outlines the extraction of the study variables and relationships.

Chapter 4: outlines the research methodology approach, and the development of the survey items.

Chapter 5: describes the collected data and presents the results of exploratory factor analysis validity, reliability, and confirmatory factor analysis tests. The chapter reports as well the results of structural equation models and hypotheses testing.

Chapter 6: presents the discussion of results, analysis of the model relationships, and the relation to the previous body of knowledge.

Chapter 7: outlines the research conclusion, contributions to theory and practice, limitations, and the recommendations for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter describes theories and conceptualizations of firm cultural intelligence (FCI), international marketing capabilities (IMC), and social media technologies (SMT). The fast and dynamic changes of global markets, internet availability, and more significant online cross-cultural interactions reveal the need for multinational enterprises (MNEs) to develop new capabilities for higher performance in international markets. The FCI and SMT concepts represent the enablers of IMC and firm performance in a global environment. The chapter presents the three concepts and highlights the possible relationships between them for research direction. The chapter starts with the definition of cultural intelligence concept and how it is conceptualized on individual and firm levels. Moreover, it continues to review SMT studies that attempted to understand firm social media adoption capabilities and cross-culture usage of online platforms. Additionally, the chapter defines the IMC construct by examining its' operationalization, relation to performance, and how cultural factors influence it. Finally, the chapter concludes with a comprehensive understanding of the research constructs that are employed throughout the thesis.

2.2 Review of Cultural Intelligence

2.2.1 Culture and International Marketing

Cross-cultural interactions are critical factors affecting MNEs' marketing capabilities and strategic management in foreign markets. Cultural influence on marketing strategies is an exciting area of research

for marketing scholars concerned in international marketing. National culture and values impact the behaviors and perceptions of individuals. Moreover, it is considered as strong forces that shape the international marketing field (Engelen & Brettel 2011). A large number of MNEs generates higher sales in foreign markets compared to domestic business value. Broad knowledge of international stakeholders' culture is essential to communicate and build relationships during cross-cultural interactions. Culture information criteria are either subjective or objective (Figure1). Objective characteristics are related to economic data, and subjective criteria are related to values, perceptions, and behaviors shared by its citizens. Cross-cultural research focuses mainly on cultural values, and four frameworks are developed by scholars to measure its dimensions. Despite the criticism, Hofstede's work remains the most famous model. However, other essential seminal studies highlight substantial development in the field of national culture dimensions, such as the work of Schwartz, Inglehart, and the most recent GLOBE project (Diehl & Terlutter 2006).

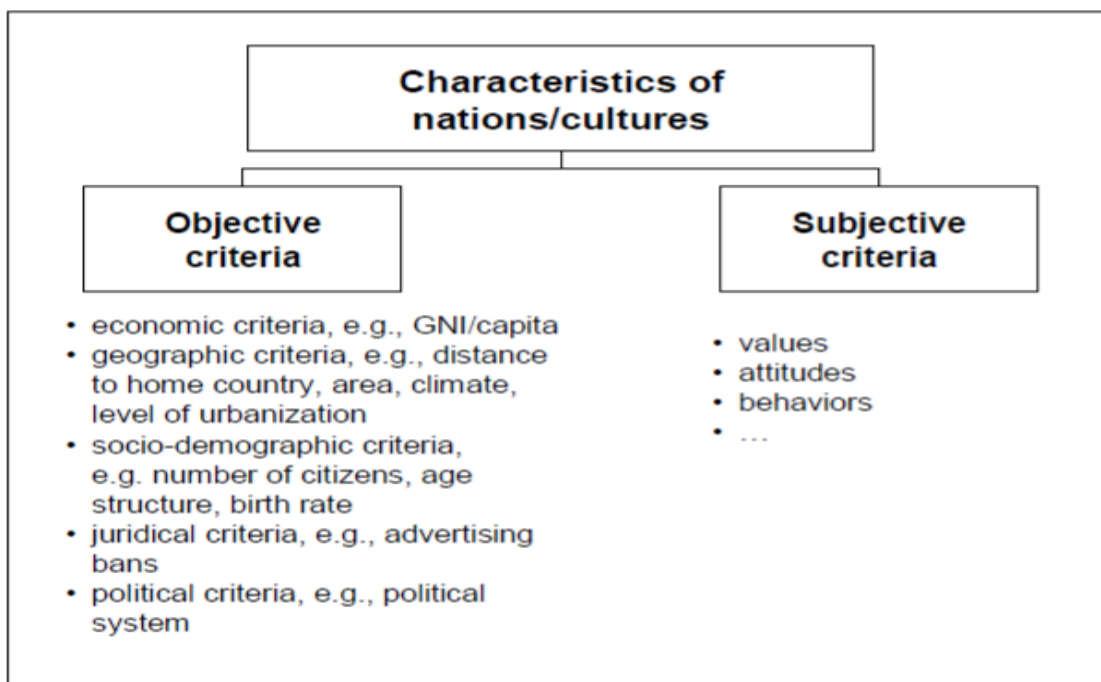


Figure 1: Characteristics of nations/cultures (adapted from Diehl & Terlutter 2006, p.422)

Culture is defined as: “the collective programming of the mind that distinguishes the member of one group or category of people from others” (Hofstede 2011). Hofstede’s cultural dimensions are widely used in international marketing and cross-cultural studies. Accordingly, their relevance is confirmed to understand the influence of culture on consumer behaviours and marketing activities (Soares, Farhangmehr & Shoham 2007). The extensive usage of this categorisation is related to the simplicity of measurement and the high number of countries included. Also, new frameworks have limited contribution and minimal advancement to the previous work of Hofstede. This scale is useful to understand consumer behavior cultural differences over the years (de Mooij & Hofstede 2010). The original work of Hofstede (1980) defines four categories for country culture measurement: power distance, individualism versus collectivism, masculinity versus femininity, and uncertainty avoidance. Additionally, the two dimensions of short versus long-term orientation and indulgence versus restraint were added later (Hofstede 2011). Power distance defines to which extent the least powerful individuals of organizations or institutions accept and expect an unequal distribution of power. For example, in cultures that score low on power distance, subordinates expect to be consulted as opposed to high power distance cultures that believe that lower-ranking persons expect others to tell them what to do. Individualism is the opposite of collectivism and explains on the societal level to which extent an individual is integrated into groups. Ties are weak in individualistic cultures as opposed to strong connections in collectivists cultures. For example, individualistic cultures stress the right to privacy, whereas belonging is crucial in collectivist cultures. Masculinity versus femininity explains the distribution of values between the two genders. As an example, societies that score higher on femininity dimensions emphasize sympathy for the weak; whereas, in masculine cultures, the strong is admired. Uncertainty avoidance refers to society’s tolerance for the unknown. For example, societies that have low uncertainty avoidance dislike rules, change jobs, and they are comfortable with ambiguity. However,

strong uncertainty avoidance cultures need rules, clarity, and structure. Short versus long-term oriented cultures differ in their focus on important life events and time perception. Short-term orientation societies emphasises on past or present events, whereas the future will highlight the most critical event for long-term oriented cultures. Moreover, a good person is stable, and the same in short-term oriented versus an adaptation to the circumstances is perceived as a good individual in long-term orientation societies. Finally, the indulgent cultures respect the primary gratification of having fun and enjoy life events, whereas, restraint societies control the need for gratification with strict social norms (Hofstede 1980; 2011).

National culture affects MNEs' internationalization and operation from different aspects. Tihanyi, Griffith and Russell (2005) conduct a meta-analysis to understand the role of cultural distance on MNEs' choice of entry mode, international diversification, and performance. The authors define cultural distance as managers' cultural values differences between host and MNEs' home country and conclude that factors such as country of origin or industry type are essential moderators of the cultural distance and MNEs performance in foreign markets. Other strategic decisions for internationalisation are Mergers and acquisitions, and previous researchers argue the impact of cultural differences on post integration performance, such as different languages, a legal system, and national cultural barriers. The compatibility of workforces' culture remains an issue during the integration phase, and the use of social integration mechanisms such as joint training, personal rotation, short visits, and meetings facilitates the acceptance of other nationalities and cultures (Björkman, Stahl & Vaara 2007). Another aspect of cultural influence on MNEs' operation is reflected during planning processes, and planners should be aware of different stakeholders' culture during the planning process. For example, host and home country individuals might reveal differences in planning approaches such as bottom-up or top-down processes.

MNEs can avoid clashes between headquarter and subsidiaries during the planning processes, and the presence of well trained and skilled managers minimise the concern of failed planning due to national cultural disparities (Brock, Barry & Thomas 2000). Besides, cultural differences might influence the subsidiaries' operations and erodes the ability of MNEs to learn from their international experiences. In dissimilar cultures, subsidiaries' mortality becomes a result of erroneous inferences from previous experiences. Thus, MNEs' structural difficulties occurred and inhibited the learning processes for successful international expansion (Zeng et al. 2013).

From an international marketing standpoint, Beck, Chapman and Palmatier (2015) explain that cultural factors impact firms' relationship marketing activities and, ultimately, performance in foreign markets. For example, loyalty programmes are proposed to increase purchasing habits in high collectivist cultures, since consumers in these countries emphasize the role of close relationships and group identity. Firm knowledge of markets and consumers in foreign countries is essential for developing marketing skills in cross-cultural interactions. MNEs' marketing know how is a cultural understanding of people's perception, attitude, and behaviors followed by needs fulfillment. Transfer of marketing skills during strategic alliances faces barriers of greater cultural distance. As a result, the ambiguity level increases between partners during the knowledge transfer process (Simonin 1999).

Cross-cultural interactions have increased in the last decade because of internet availability and speed. MNEs have acknowledged the emergence of new mediums of communications and attempted to build an online presence through websites and social media platforms. Hermeking (2006) study explores the influence of cultural characteristics on firms' website design and messages and argues the importance of websites' culture adaptation to cope with consumers' preferences. The study concludes that successful adaptation can be achieved through the inclusion of pictures, visuals, slogan, and aesthetics that represent specific cultural values.

The emergence of online platforms and virtual communities explain even more complexities for the international marketing paradigm. MNEs' marketing knowledge of national cultures is an integral part of strategy development in global markets. Furthermore, globalisation and information technology advancement facilitates the creation of a dynamic multicultural environment characterised by fluid engagement and interactions of multiple cultures consumers, brands, and competitors. Thus, firms' marketing knowledge of static cultural values is an important starting point to manage and function in highly connected and multicultural settings. MNEs need to develop new capabilities that support the successful management of international and multicultural markets (Demangeot, Broderick & Craig 2015).

International markets highlight opportunities for MNEs' growth and expansion in scale and scope. Firms' stakeholders' cultural differences remain a significant challenge for success and productivity in different cultural countries. In fact, customers' perceptions, attitudes, and decision -making processes related significantly to their cultural values embedded in their consumption or purchase behaviors. On the other hand, the cultural distance between MNEs' headquarter and subsidiaries attenuates the communication and knowledge transfer, and ultimately, affects performance. The acquisition and dissemination of foreign cultures enhance firms' anticipation and responsiveness to foreign customers' needs. Moreover, the incorporation of cultural cues in the development of marketing capabilities (MC), processes, and strategies is a critical success factor for MNEs' performance in foreign markets.

2.2.2 Cultural Intelligence Concept

Earley and Ang (2003) conceptualise the cultural intelligence (CQ) concept to answer a gap in the general intelligence literature from a cultural perspective. The authors define CQ as an individual's capability to function and manage effectively in multicultural settings. The construct is multidimensional

(Figure 2) and complements other types of intelligence, such as emotional or social intelligence in situations influenced by cultural diversity (Van Dyne et al. 2012). CQ consists of metacognitive, cognitive, motivation, and behavior intelligence dimensions. Metacognitive refers to the processes of cultural knowledge acquisition and structure, while cognitive CQ constitutes the socioeconomic, legal, and basic culture values knowledge. Moreover, motivational CQ reflects the ability to direct energy to learn and function in multicultural settings. Behavioral CQ explains the verbal and non-verbal actions during cross-cultural interactions (Ang et al. 2007). The explanation of why some people are more successful than others in managing cross-cultural interactions highlights the importance of the construct. Thomas (2006) builds on the previous conceptualisation by Early and Ang (2003). However, mindfulness is introduced as a metacognitive state that links the cultural knowledge cues and processes to the behavior dimension. The author emphasises that cultural metacognition (Figure 3) relates the interactions between cultural knowledge and skills for effective, culturally intelligent behaviors (Thomas et al. 2008). Additionally, motivation facet is removed from the four dimensions of CQ as it is not a requirement for culturally intelligent individuals to communicate positively in multicultural settings (Thomas et al. 2012).

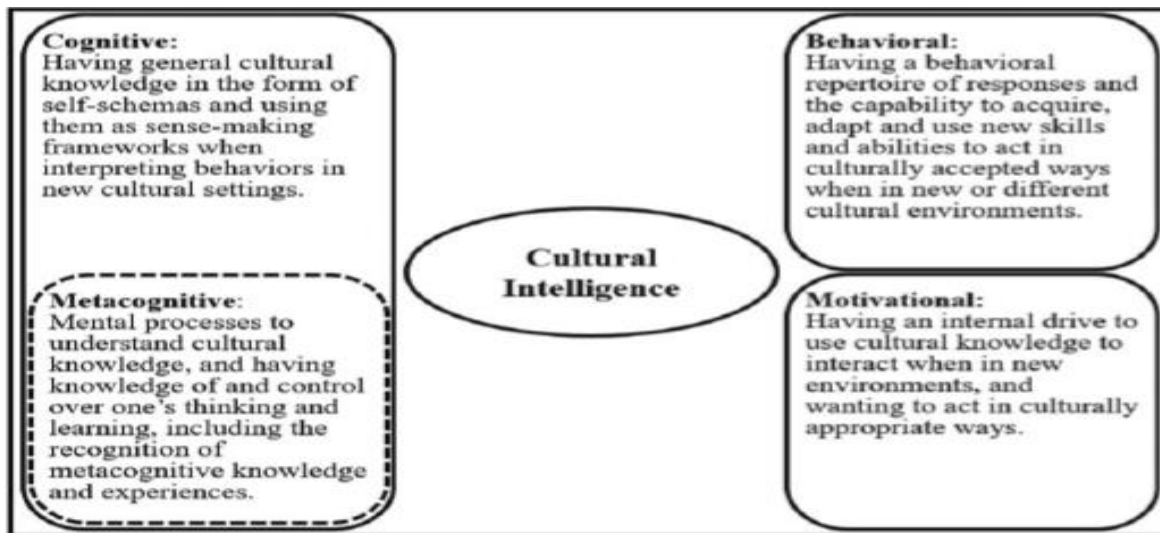


Figure 2: Earley and Ang 2003 CQ conceptualisation (adapted from Ott & Michailova 2018, p. 104)

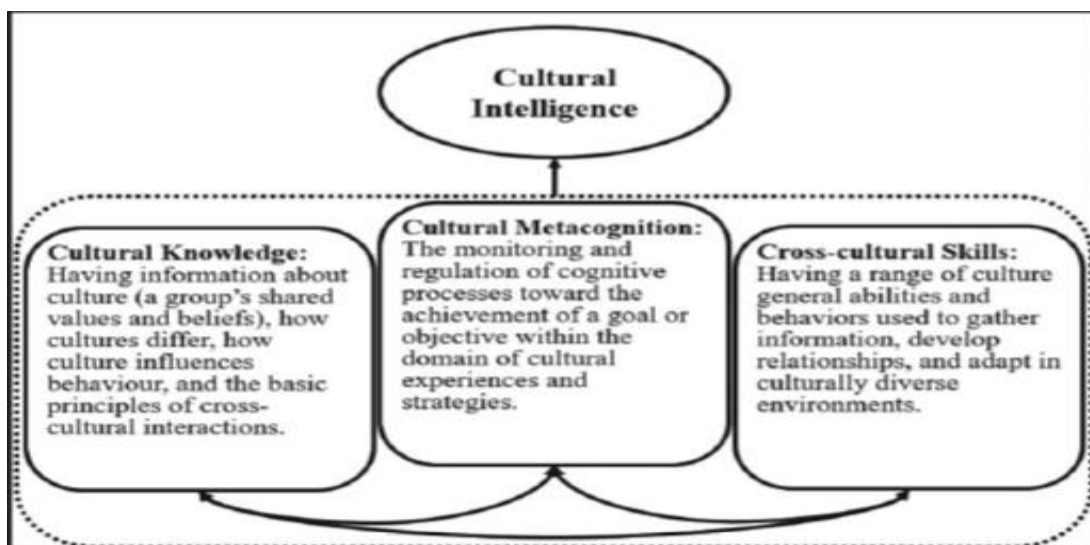


Figure 3: Thomas et al 2008 conceptualisation of CQ (adapted from Ott & Michailova 2018, p. 104)

Despite the debate of CQ aggregation measurement and clarification of the multi-faceted relations and interactions, the two schools of thought share similarities in the critical role of CQ as a multidimensional construct and define it as the ability, knowledge, and skills of individuals for effectively manage and function in cross-cultural settings. They differentiate the construct from other types of intelligence, such

as social and emotional intelligence, and emphasise the role of studies to develop the measurements, antecedents, and outcomes of CQ constructs in different cultural and population contexts.

Ang et al. (2007) shed light on the first scale for measuring CQ on the individual level. It consists of 20 items representing the four dimensions of the CQ concept. Later, Ang and Van Dyne (2008) employed the scale in six different studies and confirmed its validity across time and countries. Recently, Alon et al. (2016) identify an instrument to measure CQ in a business context and name it business cultural intelligence quotient. The study argues an advantage over the proposed CQ scale of Ang et al. (2007) as it is specific for the workplace environment, and it is applicable for the assessment of expatriate and global virtual team CQ. To validate the new business scale of CQ, Alon et al. (2016) explore its antecedents with business practitioners sample from five distinctive countries. Thus, it suggests that professionals' number of former residence countries, education level, and multiple language fluency are significant predictors of the CQ level. Studies are needed for further development of the business cultural intelligence quotient scale as previously validated and highly cited scale of Ang et al. (2007) in cross-cultural studies.

Global leadership, cross-cultural team management, international team performance, and expatriate adjustment are topics related to the CQ concept as a result of interaction and communication with other cultures. For instance, Jyoti and Kour (2015) argued that globalization increases cross-cultural interactions, and managers on international assignments need the ability to communicate and negotiate effectively in a multicultural environment. The study measures the relationship between CQ and task performance and investigates cultural adjustment as a mediator between the two constructs. The research concludes a positive direct relation between CQ and task performance, and indirect relationship mediated by cultural adjustment. Additionally, culturally intelligent managers have a greater ability to interact

with individuals outside their cultures, which improves the performance and achievement of required tasks. MNEs require leaders that successfully negotiate and communicate with suppliers and other stakeholders to achieve a common purpose during a cross-cultural interaction. Imai and Gelfand (2010) propose that CQ improves negotiation processes and outcomes. They attempt to measure the relationship between CQ and cooperative motives defined as the psychological attributes of a successful negotiator. Results suggest that individuals with a higher level of CQ are more likely to have higher collective purposes. Culturally intelligent negotiators possess the psychological characteristics to overcome difficulties of intercultural negotiation and integrate strategies to understand their culturally unfamiliar partners. From a customer relationship point of view, Hansen et al. (2011) propose that culturally intelligent salespeople adapt to their customers' culture, and utilise the cultural knowledge structure to inform behaviours that improve performance. MNEs' knowledge of global stakeholders, customers, and foreign business environments requires the development of global leader's skills, and the international experiences enrich expatriate managers with tacit knowledge as a result of multiple skills acquired, cognitive complexities, and network extension. Thus, leaders' CQ capabilities transform international assignments into developing a global mindset (Lovvorn & Chen 2011). Kok-Yee Ng, Van Dyne and Soon Ang (2009) explain the importance of managers' engagement in experiential learning during an international assignment and propose that learning is a process and leaders go through experiencing, reflecting, thinking, and acting to transform learning into outcomes. Additionally, the study argues the role of leader CQ as a key individual capability that impacts the level of involvement in experiential learning. The culturally intelligent leaders reflect, implement, and test ideas during their cross-cultural interactions. Therefore, CQ and international experiences are essential factors that influence individual self-efficacy, knowledge, skills, and ultimately, it facilitates the development of global leaders. MNEs admit the challenge of success in foreign markets. Leaders' skills and intelligence in domestic markets

might not ensure the same results in diversified and cross-cultural settings. Alon and Higgins (2005) highlight the importance of global business for MNEs and emphasise effective management of interactions with customers, own employees, and other stakeholders in international markets. The study explains the role of verbal, mathematical, and emotional intelligence as critical enablers of leadership success in domestic markets, and suggests that leadership behaviours are complemented with CQ since previous factors of intelligence did not translate leadership success in international markets. Global competitive pressure and growth opportunity in foreign markets raise the demand for MNEs for competitive global leaders. Beyond the behaviors of successful leadership in the country of origin, managers need to adapt and learn new capabilities since international business units employees and customers are culturally different. Groves and Feyerherm (2011) measure the relationship between leadership CQ and performance in different team settings empirically. Leaders CQ was found to predict higher performance when the team is culturally diversified; whereas, in a low diversity team, the relationship is not significant. Besides, the authors conclude that leader CQ predicts unique variance in the performance of diversified teams beyond the effects of other abilities. While emotional intelligence is a strong predictor of national leadership effectiveness, CQ significantly explains the leader's effectiveness in a cross-border assignment (Rockstuhl et al. 2011). Results of studies confirm the prepositions of Alon and Higgins (2005) and Earley and Ang (2003) empirically by highlighting the importance of CQ as a unique construct that explains leadership performance in a multicultural environment beyond the effect of other leadership competencies and behaviors.

Leaders' global mindset is essential for MNEs' performance and success in international markets, and the global team members' cross-cultural skills complement managers' CQ competencies through high levels of communication, interaction, and exchange of information. CQ factors positively and significantly impact knowledge sharing in cross-cultural team settings (Chen & Lin 2013). Collaboration

is a crucial factor for information sharing and a more exceptional decision-making process. Janssens and Brett (2006) argue the role of information extraction and decision making as essential factors for global teams' success and propose that culturally intelligent collaboration encourages team members to effectively deploy their knowledge and expertise to support the achievements of the team overall tasks. Globalisation fosters a diverse business environment, and MNEs face the challenge of engaging multicultural team members who possess different values and work style. Adair, Hideg and Spence (2013) suggest that shared values between newly formed team members are the foundation of trust and organised processes that lead to team success. The research reveals that team-high scores of CQ facilitate the development of shared values during interactions, and the abilities of sense-making, interpretation, and communication are critical forms of CQ that support the creation of shared values in multicultural teams. Culturally intelligent MNEs' teams foster a high level of trust with their supply chain members in foreign countries. Such successful interaction and communication explain higher supply chain performance and influence the firms' competitive intelligence, defined as organisational capabilities of scanning internal and external environments, including competitors changing activities (Tuan 2016).

MNEs' success in foreign countries requires an extensive understanding of stakeholders' cultural diversity. Leaders' global mindset and team members with a high level of CQ are essential resources of organizations' operating globally. Triandis (2006) highlights that the majority of 21st-century organisations are multicultural, and products are designed, produced, and marketed in many countries. Accordingly, MNEs' employees have to build a relationship with others that have different cultural attributes. Cultural intelligence knowledge and skills are requirements for MNEs individuals to develop mutual goals with other members of the dyad. This form of intelligence proposes that suspending judgment until the identification of relevant information and paying attention to the situation are essential attributes of culturally intelligent individuals. Organisations have the opportunity to understand global

consumers, suppliers, and others while building on their leaders' and teams' cultural intelligence. Culturally intelligent people enhance collaboration and mutual understanding and adjust to multiple organisational contexts. MNEs with cultural intelligence capabilities have higher probabilities of achieving success in today's highly globalised, connected, and fast-changing world. Table 1 highlights a review of more studies that contribute to the development of the individual CQ concept and the outcomes of the construct. The findings explain that individual cultural intelligence relates positively to cross-cultural work adjustment, expatriate tasks and job performance, international opportunity recognition, self-efficacy, and leaders' performance. The concept of cultural intelligence presents an opportunity for MNEs' to develop and manage their firm level cultural intelligence in foreign markets. The individual level of cultural intelligence facilitates cross-cultural adjustment and performance in a cross-cultural environment. Thus, this form of intelligence might represent the resource or capability that enhance the firm's adaptation, decision-making, and performance in international markets (Ang & Inkpen 2008).

Table 2.1: Review of cultural intelligence studies

Study Design and Sample	Selected Findings	Authors
Cross-sectional survey: 342 national bank managers in India	CQ enables the effective cross-cultural adjustment of managers to the host country's working conditions. Moreover, previous foreign experiences moderate the relationship between CQ and cross-cultural adjustment.	Jyouti and Kour 2017
Cross-sectional survey: 332 expatriates in Malaysia	CQ is significantly and positively related to job	Ramalu et al. 2012

	performance. Interaction and work adjustment partially mediate the relationship between CQ and performance.	
Cross-sectional survey: 338 business undergraduates in Singapore	The big five personality traits relate positively to CQ. Specifically, openness to experiences relates to the four dimensions of CQ.	Ang, Van Dyne and Koh 2006
Cross-sectional survey: 332 global Brazilian MNEs' managers	Job performance is greater for high cultural intelligent managers. Additionally, job satisfaction partially mediates the relationship between CQ and job performance	Barakat et al. 2016
Cross-sectional survey: 169 MNEs' expatriate managers in Singapore	CQ moderates the relationship between expatriates supporting practices and cross-cultural adjustment.	Wu and Ang 2011
Cross-sectional survey: 410 nationally diverse employees of a facility management company in Germany	Leaders with high CQ enhance team performance and diversity climate of nationally diverse and more interdependent teams.	Rosenauer et al. 2016
Cross-sectional survey: 210 MNEs' expatriates working in United States.	Metacognitive and cognitive CQ relate positively to international opportunity recognition. Moreover, metacognitive CQ is associated with	Lorenz, Ramsey and Richey 2017

	innovativeness; however, this relationship is partially mediated by international opportunity recognition.	
Cross-sectional survey: 103 MNEs' expatriate managers working in Croatia	The four dimensions of CQ relate significantly and positively to conventional and reverse knowledge transfers between MNEs and their subsidiaries.	Vlajčić et al. 2018
A meta-analysis of 199 independent samples and (N=44,155)	CQ relates positively to task performance. This relationship is partially mediated by socio-cultural adjustment, Intercultural judgment, and decision-making.	Rockstuhl and Van Dyne 2018
Cross-sectional survey: 225 Chinese managers working in foreign MNEs	CQ relates positively to communication effectiveness and job satisfaction.	Bücker et al. 2014
Cross-sectional survey: 190 expatriates of the top ten Korean large companies	CQ mediates the relationships between previous international experiences, pre-departure cross-cultural training, and expatriates' cross-cultural adjustment.	Koo Moon, Kwon Choi and Shik Jung 2012
Cross-sectional survey: 181 working adults in the United States of America	CQ mediates the relationship between previous intercultural contacts and international leadership potential.	Kim and Van Dyne 2012

Cross-sectional survey: 295 international students in Taiwan universities	CQ relates positively to cross-cultural adjustment. This relationship is moderated by emotional intelligence.	Lin, Chen and Song 2012
Cross-sectional survey: 152 Japanese expatriates	Motivational CQ explains higher variance in general work and cross-cultural adjustment than the five personality traits.	Huff, Song and Gresch 2014
Cross-sectional survey: 134 MNEs' expatriates in Malaysia	CQ relates positively to expatriates' general, interaction, and work adjustment. Consequently, the enhanced adjustment influences the task and contextual expatriates' performance.	Abdul Malek and Budhwar 2013
Cross-sectional survey: 222 MNEs' expatriates in Taiwan	The relationship between CQ and performance is mediated by cultural adjustment and effectiveness. Moreover, previous international experiences moderate the relationship between CQ and cultural adjustment and effectiveness.	Lee and Sukoco 2010
Cross-sectional survey: 152 expatriates working in different organizations in Saudi Arabia	CQ moderates the relationship between expatriates' knowledge sharing with national host country	Ali et al. 2019

	employees and individual or team creativity.	
Cross-sectional survey: 403 employees in the United Kingdom	CQ moderates the relationship between cultural orientation and conflict management style, such as avoiding, forcing, and problem-solving.	Caputo, Ayoko and Amoo 2018
Cross-sectional survey: 409 MNEs employees in Vietnam	Leaders CQ moderates the relationship between the organisations' entrepreneurial orientation and competitive intelligence	Tuan 2015
Longitudinal design: 254 students from Hong Kong in an exchange programme	Cross-cultural adjustment predicts the development of CQ. However, the implicit cultural beliefs relate positively to intercultural rejection sensitivity, which inhibits cultural adjustment, and ultimately, the development of CQ.	Chao, Takeuchi and Farh 2017
Cross-sectional survey: 393 foreign laborers working in Taiwan	CQ relates positively to job involvement. This relationship is mediated by cross-cultural work adjustment. Moreover, cross-cultural training moderates the CQ and work adjustment positive relationship.	Chen 2015

Longitudinal design: 89 international students representing 15 nationalities were enrolled in fourteen weeks course in Singapore.	Cognitive CQ relates positively to creativity; however, too much cultural knowledge inhibits creativity. Furthermore, metacognitive CQ mitigates the negative influence of high cultural knowledge on creativity.	Chua, Morris and Mor 2012
Longitudinal design: 373 students representing 31 nationalities in North American and Australian universities	General self-efficacy and contextual factors such as the group intercultural contact and structure contribute to the development of CQ.	MacNab, Brislin and Worthley 2012
Longitudinal design: 370 multicultural managers and students	General self-efficacy is the main predictor of successful CQ capability development	MacNab and Worthley 2012
Longitudinal design: 145 multicultural military participants from Turkey	International experiences relate positively to CQ. This relationship is moderated by high openness to experience and extraversion personality traits	Şahin, Gurbuz and Köksal 2014
Longitudinal design: 135 students from the United States of America divided into test and control group	Short-term international experience contributes to the development of CQ in the test group.	Engle and Crowne 2013
Longitudinal design: 42 MBA professionals from the United States of America	A short-term study tour enhances the development of CQ.	Wood and St. Peters 2013

Longitudinal design: 110 government contracting trainees from United States of America.	Cross-cultural training relates positively to the development of CQ and specific self-efficacy. After the training, Specific self-efficacy relates positively to CQ.	Rehg, Gundlach and Grigorian 2012
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2.2.3 Firm Cultural Intelligence Capabilities

Firms' performance in international markets is a significant contributor to the growth and success of MNEs. Globalisation and information technology increase cross-cultural interactions between firms and multiple stakeholders such as customers, suppliers, and subsidiaries coworkers of different cultures. Ang and Inkpen (2008) suggest that firms with cross-cultural capabilities management will outperform less culturally intelligent firms. These authors introduce the term firm-level cultural intelligence and define it as: "form of organizational intelligence or firm-level capability in functioning effectively in culturally diverse situations" (Ang & Inkpen 2008, p.338). Their study proposes that firm cultural intelligence (FCI) is the main contributor to organizational success in foreign markets and conceptualises FCI by drawing on the individual culture intelligence concept (Earley & Ang 2003) and resource-based view (Barney 1991) as the theoretical background. Moreover, it argues three dimensions (Figure 4) that impact multiple firm levels and constitute the FCI. A first valuable resource is the CQ of the top management team since their attributes directly affect global strategy and performance. The other vital resources are the processes and routines influenced by CQ for competitive factors management such as a cultural match with foreign partners. The last pillar of the FCI dimensions is structural, and explains how the

firm formal and informal reporting structure can be influenced by culture, and how a culturally intelligent firm with structural norms prevents fault lines and foster an environment of mutual understanding and objectives with partners and stakeholders.



Figure 4: Firm cultural intelligence framework (adapted from Ang & Inkpen 2008, p.343)

Despite the importance of FCI dimensions explored by Ang and Inkpen (2008), the research suggested items were not tested empirically to predict the organisational performance in foreign ventures.

Cross-cultural interactions increase under the pressure of globalization, and MNEs need to develop cultural intelligence at the organisation level to face the challenges of dynamic foreign environments and achieve competitive advantage. Moon (2010) shares similarities with Ang and Inkpen as using the individual CQ level as a starting point of conceptualising the FCI level. However, instead of drawing on the resource-based view of the firm, he proposes dynamic capabilities (Teece, Pisano & Shuen 1997) as the theoretical foundation of conceptualisation. The study argues that cross-cultural environments are complex, and organisations require the presence of specific dynamic capabilities to overcome challenges and succeed in multicultural situations. Therefore, FCI is defined as “organization’s capacity to reconfigure its capability to function and manage effectively in culturally diverse settings” (Moon 2010,

p.460). FCI model consists of three different capabilities (Figure 5) that have unique and complementary roles in predicting how FCI influences the MNEs' effective management of cross-cultural interactions. Dimensions of FCI are Processes, positions, and paths capabilities.

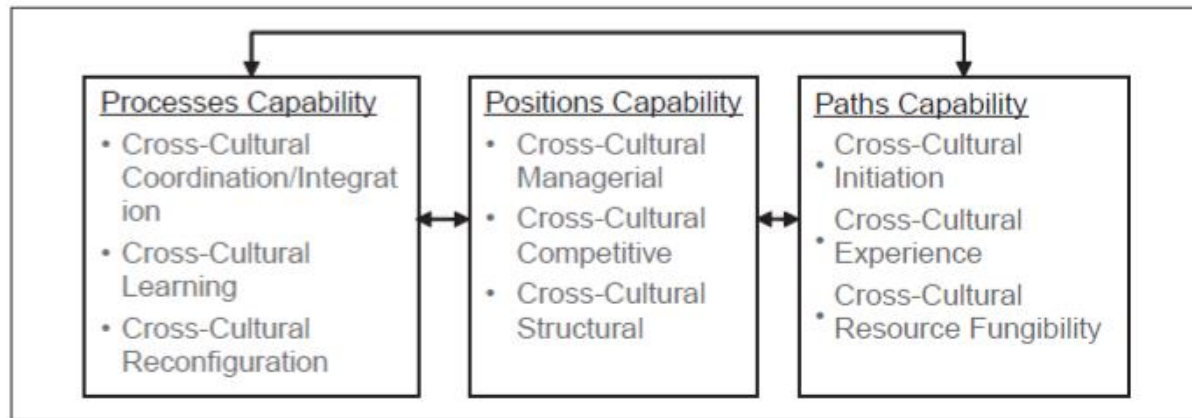


Figure 5: Firm cultural intelligence model (adapted from Moon 2010, p.461)

Processes capability of culturally intelligent firms explains practices and knowledge integrated, reconfigured, and transformed in culturally diverse settings. Positions capability refers to the optimal firm assets such as financial or technological resources that facilitate cross-cultural adaptation, and it is conceptualised as Ang and Inkpen 2008 dimensions of FCI. Path capability represents the time of firm internalisation, cross-cultural experience, and the level of resources' alternative use.

Moon's (2010) conceptualisation of firm-level cultural intelligence differs from Ang and Inkpen's (2008) model since it draws on the dynamic capabilities framework. Thus, FCI depends on the coordination, integration, and reconfiguration of resources to adapt to new cultural situations. Moreover, firm path capability is a critical factor of success in international markets since it facilitates firms' adaptation of its offerings, services, and relationships to new cultures and prevents organisational inertia and improves firm performance in foreign markets. Yitmen (2013) reveals the importance of firm-level cultural intelligence in the strategic alliance of contracting organisations operating in an international

market. The research draws on Moon's (2010) conceptualisation of FCI and measures empirically the relationship between FCI, cross-cultural competence, and strategic alliance success. Results show that constructs of FCI represented by process capability, position capability, and path capability are significantly and positively related to the international strategic alliance, and the stronger their influence on cross-cultural competence, the higher the success of the global strategic capability.

Other researchers take another perspective while measuring firm level cultural intelligence. For instance, Chen, Liu and Portnoy (2012) conduct a multilevel approach to estimate the relationships between individual motivational CQ, cultural sales, and the moderation effect of firm motivational cultural intelligence, which was measured as an average of individual motivational CQ responses and aggregation statistics. Despite a positive impact of firm level motivational intelligence on individual motivational CQ to generate cultural sales, the weakness of the study remains in the adoption of one dimension of CQ constructs. Moreover, the aggregation measure of firm-level motivational CQ does not recognise the collective attributes of the construct by merely changing the referent to the firm level. In another attempt to answer the question of aggregation of measures from individual CQ level to the organisation, van Driel and Gabrenya (2012) conclude a cognitive CQ factor at the organisational level and not for a metacognitive dimension. Such results inform the researchers to refine the conceptualisation of CQ concept at a firm level of analysis by performing studies focusing on the organisational level and not relying on individual-level data aggregation.

In a recent attempt to develop the FCI scale without the reliance on individual data-level aggregation, Lima et al. (2016) build on a previous conceptualisation of FCI to generate a pool of items that were discussed and refined with a panel of experts through the use of the Delphi technique. The result generates five factors, 21 items for FCI measurement. Factors are leadership behavior, adaptability,

training, intentionality, and inclusion. These factors intersect with previous conceptualisation (Ang & Inkpen 2008; Moon 2010). However, the responses of only nonprofit organisations and the deletion of structural cultural intelligence items highlight the methodological limitations of the study. Thus, the findings of this research might not be appropriate to measure cultural intelligence to for-profit organisations.

Scholars have advanced knowledge of firm-level cultural intelligence during the last decade. Culturally intelligent firms have leaders that adapt, manage, and function effectively during cross-cultural interactions. Besides, organizations' processes and routines that support cross-cultural management are integrated and reconfigured to overcome the challenges of foreign markets, and experience in cross-cultural interactions might represent an advantage for MNEs' success in global settings.

Globalisation increases cross-cultural interactions, and the internet availability and speed facilitate the emergence of social media platforms that explain even higher communication and information exchange between MNEs and international stakeholders. The concept of cultural intelligence as an organisational resource is promising to understand firm performance in foreign markets.

2.3 Review of Social Media Technologies

2.3.1 Social Media Technologies Concept

Social media technologies (SMT) change the way individuals search, create, and share information. These newer online technologies change the traditional way of MNEs' communication, information acquisition, customer relationship management (CRM), and firms' learning abilities. Also, SMT present an opportunity for greater cross-functional communication and knowledge transfer between subsidiaries. Thus, the effective integration of these platforms might support the development of marketing

capabilities (MC) in the international markets and contribute to performance (Stephen 2016; Kumar et al. 2016; Trainor et al. 2012). Kaplan and Haenlein (2010, p.61) define social media as: “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.” Classification of SMT (Figure 6) is based on two dimensions: 1- Social presence/ media richness and 2- Self-presentation/ self-disclosure. For example, Facebook scores higher than blogs on social presence/ media richness since it enables the sharing of pictures and videos in addition to text messages shared by blogs.

		Social presence/ Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

Figure 6: Classification of social media (Adapted from Kaplan & Haenlein 2010, p.62)

However, blogs score higher than Wikipedia on self-presentation/ self-disclosure since the latter is more about specific contents and not related to users’ activities and personal information (see Figure 6) (Kaplan & Haenlein 2010). In another attempt to conceptualise SMT, Peters et al. (2013, p.282) draw on communication and sociology research disciplines, and propose that SMT are: “communication systems that allow their social actors to communicate along dyadic ties.” SMT are differentiated from traditional media and represent a new kind of organism that is stimulated by marketing inputs to achieve marketing outcomes (Figure 7). Social media organism is portrayed by actors driven by motives to

communicate with their ties, play a different social role, and produce content that is shared with their network during interactions (see Figure 7).

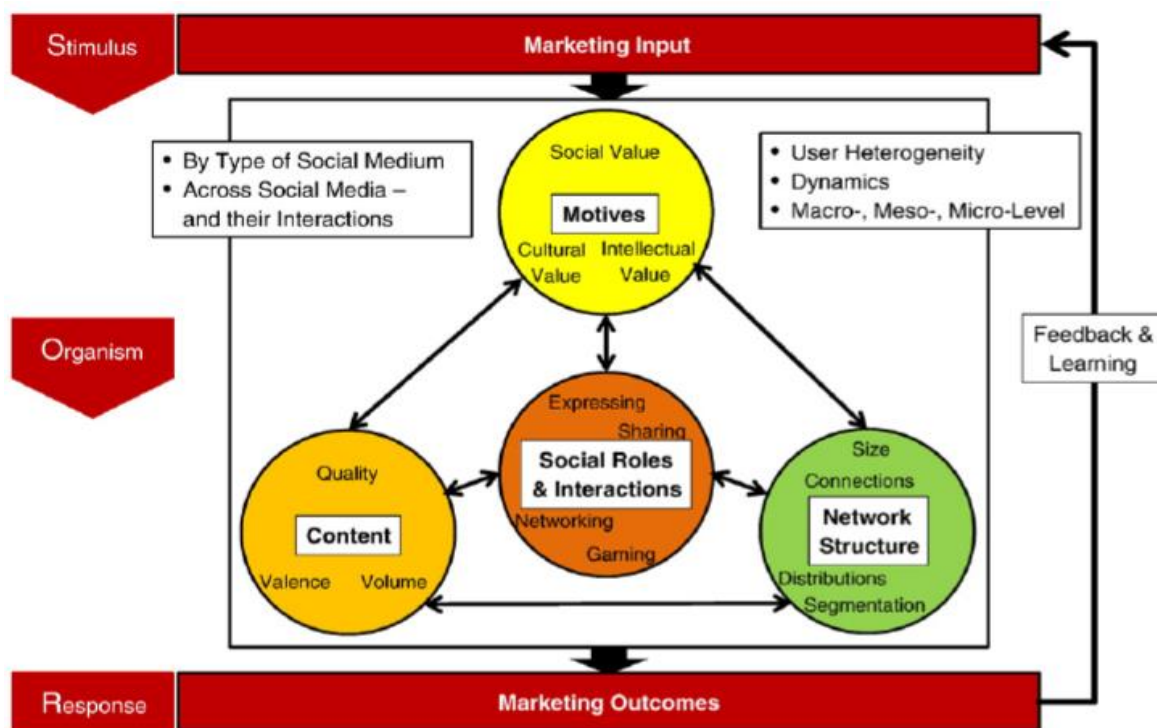


Figure 7: Social media framework (adapted from Peters et al. 2013, p.282)

The rise of SMT dramatically influences consumer behaviours and highlights a shift of power from brands and firms toward the voice of customers. SMT facilitate consumers' power evolution from individual-based sources to network-based sources. This capacity starts with consumers' consumption and purchase behaviours followed by information access and content creation empowered by SMT. It evolves to content modification and network distribution through sharing behaviors and facilitates community buying power and the birth of new marketplaces (Labrecque et al. 2013). While consumers' buying decision process continues to be linear during the digital age, SMT affect the duration of each stage and the number of evaluated brands in each step. Unlike the traditional media process of relying

on the company controlled messages, SMT facilitates information seeking from other consumers. Thus, confidence in choices became higher, and more excellent brand connections emphasised advocacy and loyalty (Lindsey-Mullikin & Borin, 2017).

Consumers' power influence and online presence impact the marketing paradigm and force MNEs to consider SMT in their marketing programs. According to Hanna, Rohm and Crittenden (2011), SMT interactive communication and tools revolutionise the marketing ecosystem. Previous product and promotions concepts are almost myths in the era of social media platforms and digital media. Organisations require new media strategies approaches that complement the traditional mediums by expanding consumers' reach capabilities to engagement and long-term relationships. Following the same understanding, Kane (2015) highlights the beneficial effect of SMT on two main organisational capabilities. First, companies social network is created and managed effectively compared to the traditional way. Second, digital social media content is easy to find and access; hence, the right information is located at the right time for better decision- making. Perceived usefulness and organisational innovativeness are critical drivers of SMT adoption in firms affected by highly demanding customers for online interactions (Siamagka et al. 2015). Brands or services are other critical organisational assets that need to be managed effectively by MNEs affected by newer consumer online behaviours. Brand stories in the digital age are not produced or owned only by firms. Consumers take control over brand managers and generate their own stories and experiences about the brand. Accordingly, the integration of user-generated content into the communication mix of organisations remains a challenge. On the other hand, organisations can benefit from SMT by emphasising user-generated brand stories that help the brand and respond effectively to messages that harm the brand. Thus, the coordination of users and firm brand stories is essential for brands to succeed in the digital marketplace (Gensler et al. 2013).

Opportunities brought by SMT reveal essential capabilities for organisations, and business objectives, platforms' design, and how people interact, access, and share information highlight essential factors for successful integration. Organisations might deploy SMT for different purposes, Macnamara and Zerfass (2012) analyse firms' adoption of social media in communication and public relation programmes. Accordingly, two main topics are highlighted for beneficial SMT integration in an organization's communication strategies. First, social media governance, such as guidelines, training, and key performance metrics of SMT. Second, strategic benefit from social media usage. From an operational perspective, Ngai, Tao and Moon (2015) explore the factors that facilitate or inhibit the adoption of SMT in firms' daily operations and propose a better understanding of organisational orientation for the successful integration of SMT. For instance, successful factors of implementing IT systems in organizations can be extended to SMT, and the senior managers' support, organisations' culture change, and technological competencies are essential criteria for consideration. Moreover, it is critical to have the technical infrastructure for social media data analysis. Recently, Iankova et al. (2018) study the perceived effectiveness of SMT in business-to-business (B2B), business-to-consumer (B2C), and mixed business models. The research explains significant differences in the types and objectives of SMT usage between different kinds of organisations. While B2C firms focus on the relationship orientation in using social media platforms, B2B organisations adoption is more related to acquisition orientation factors. SMT complement the B2C mass consumer acquisitions and awareness through facilitating firms' higher engagement and long-term relationships with them. On the other hand, SMT support B2B organizations in acquiring more customers through eWOM and viral marketing supported by social media networks.

In conclusion, Web 2.0 internet-based technologies serve as a technical infrastructure for the creation and delivery of content on social media platforms. Text, pictures, videos, and networks are central components of SMT. From an international marketing perspective, SMT emphasise fast dissemination

and the sense-making of information and facilitate the rapid coordination of actions within the organisation and more exceptional communication with international customers. Therefore, B2C firms have to understand the power of creative consumers and acquire the ability to listen, engage, and build relationships with them on social media platforms to achieve long-term benefits and higher performance in international markets (Berthon et al. 2012). Additionally, B2B firms have the opportunity to generate and maintain a competitive advantage by exploring the organisational capabilities of SMT successful integration. From a CRM perspective, firms' successful SMT adoption, maintenance, and evaluation should match the effective management of market relations, channels, brands, and knowledge management (Wang et al. 2017). The traditional strategies of studying consumer behaviours, creating relationships, or generating knowledge about competitors and market trends can be integrated into a digital context. Online social media transforms the consumer purchase journey, CRM, and serve as new MC to generate market intelligence and support the decision making process. Thus, MNEs can benefit from such technological advances to create new capabilities that help the successful transition of value creation to the global market, which Lamberton and Stephen (2016) defined as a new way to learn, engage and influence customers' behaviours during the last 15 years.

2.3.2 Social Media Technologies Capabilities

Social media technologies (SMT) represent a new organisational capability for higher relationships with customers and business performance. Paniagua and Sapena (2014) underline the channels by which firms' SMT can be transformed into business performance (Figure 8). They suggest that social media activities explain firms' identity and reputation and impact corporate social performance through the social capital channel. SMT transform interactions such as content sharing into financial performance

through customers' revealed preferences and social marketing. Also, SMT improve corporate internal and external relationships and impact operational performance through social corporate networking channels (see Figure 8).

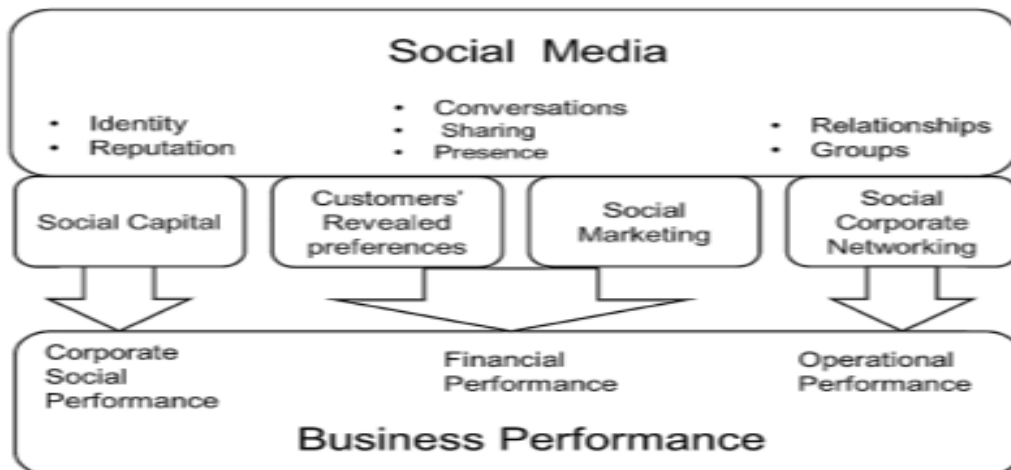


Figure 8: SMT channels for business performance (adapted from Paniagua & Sapena 2014, p.720)

Social media changes the marketing paradigm dramatically, and organisations need to adjust to the rise of consumer power, facilitate co-creation of value, understand the new social customer relationship management, and the new metrics of interaction analysis (Hennig-Thurau, Hofacker & Bloching 2013). Information created on social media platforms can be either firm or user-generated. Firms start leveraging on such new marketing capability to enhance their market presence, stakeholders' relationship, product ranking, and overall image. In the digital age, SMT facilitate the company's evaluation of customers' needs in global markets, and the success in a global context relates to the capabilities of building relationships with international customers. Felix, Rauschnabel and Hinsch (2017) highlight the role of SMT in enhancing customers' value, developing relationships with communities as well efficiently communicating with the consumer to achieve company objectives. Awareness and positive attitude toward firms' advertisements contribute to purchase intention, and such communication

capabilities can be explored through social media platforms due to highly connected networks and design, which facilitate sharing purposes and brand-consumer interactions independently of the location or the distance. Consumers' interactive experiences on social media channels deliver a positive attitude toward the products or services. Thus, SMT increase purchase intentions due to a high level of shared content through firms and customers' networks (Shen et al. 2016). SMT supports a more upper reach communication channel along with traditional media, and MNEs can benefit from such platforms to inform global customers about their services and offerings, understand their concern through interaction, and enhance their perceived value. Kumar et al. (2016) suggest the use of firm generated content through social media vehicles along with traditional channels to enhance consumer profitability, whereas the receptivity of SMT content has a significant role in customers' behavioral change. Also, the importance of SMT user or firm generated content is confirmed as well by Schivinski and Dabrowski (2014) in different industry types. They conclude that user or firm social media communication has a positive impact on brand equity and attitude, and the integration of SMT communications along other channels influences positively purchase intention. The capability of improving MNEs' image in a global context while enhancing the relationship with customers is a substantial challenge for the internationalisation of the firm. SMT facilitate the communication of cross-border customers through the management of network capabilities and support companies' establishment and maintenance of networks in ways different than traditionally used channels. Also, SMT emphasise greater interactions and explains customers' environmental variability (Bianchi & Andrews 2015). These online channels improve MNEs' image transferability into international markets for a sustainable reputation and credibility (Okazaki & Taylor 2013). SMT support global brand awareness and image through active involvement with customers and significant improvement of brand loyalty and preference (Godey et al. 2016).

Co-creation of value occurs during direct interaction with customers, and the firms have the opportunity to involve in a direct dialogue with customers for co-creation of value (Grönroos 2011). SMT interactive features facilitate engagement for co-creation of value. Sashi (2012) explains that engaged customers on social media platforms influence other customers and non-customers in their social networks. SMT support firms' ability to turn transactional customers to fans by emphasising higher emotional bond and relational exchange. Brodie et al. (2013) explain the emotional, cognitive and behavioral engagement in a virtual online community as dimensions that support customer satisfaction and brand loyalty, and SMT emphasise brand-consumer interactions and facilitate involvement through a far-reaching influence on the cognitive, emotional and activation processes of engagement. Thus, these platforms increase the intention of use and brand connections (Hollebeek et al. 2014). The proliferation of multiple online touchpoints of connection between customers and organisations improves the co-creation of value, and SMT improve customer engagement and reinforce the brand knowledge acquisition and relationship with the firm. These SMT reveal a higher level of brand interactivity and community presence that strengthens the relationship with customers for value creation (France et al. 2015). The initiation of a conversation with firms' online platforms predicts customers' future relationships and perceived value, and SMT empower customers to interact actively with products or services and activate two-way communication for value creation. Thus, SMT enhance customer's engagement which positively impacted brand value and loyalty (France et al. 2016). Customers who interact on social media platforms are active participants that share and exchange knowledge such as brand satisfaction. Thus, Firms' SMT improve customers' need prediction and enhance the participation of low involved customers (Apenes Solem 2016; Merrilees 2016). MNEs have the opportunity in the digital age to listen to customers' preferences independently from geographical locations. Interactive and personalised SMT affect customers' engagement and brand image, and global brands can drive engagement through different

creative strategies facilitated by a different type of SMT. For instance, MNEs enhance involvement with fresh, updated content of functional products or service attributes. On the other hand, SMT tools accommodate other types of brand messages such as experiential, exclusivity, and emotional appeals (Ashley & Tuten 2014). The characteristics and effective management of SMT foster customers' participation and improve the emotional level of engagement for value creation and purchase intentions (Blasco-Arcas et al. 2016). Therefore, SMT are the motivators of customer engagement and were suggested to be an integral part of the firms' CRM processes (Malthouse et al. 2013).

SMT support customer behavioral engagement, such as sharing of posts, comments, or reviews. This user-generated information explains customers' attitudes, awareness, and advocacy that influence firms' performance and value (Luo & Zhang 2013). Leeflang (2011) reveals that organisations could benefit from customers' data and knowledge extracted during direct interactions for improving products and services. Thus, effective SMT management fortify customer's firm's relationship and improve behavioral engagement during the co-creation of value. Labrecque (2014) studies the role of SMT in the building blocks of the organisation-customer relationship and proposes that SMT perceived interactivity and openness are significant contributors to customers' brand connections. Therefore, the development of beneficial relationships improves customer behavioral engagement and increases the intention of brand usage, positive word of mouth, and customers will to provide constructive feedback to the firm. This knowledge is part of organisations' relational information processes and relates positively to CRM performance, such as customer satisfaction and retention (Jayachandran et al. 2005). SMT alter traditional CRM technologies. Trainor (2012) refers to the integration of social media applications in firms' traditional processes and systems as necessary capabilities to engage the customers and improve relationships with them. The study highlights the two-way information flow incorporated by SMT versus the traditional one-way knowledge generation, such as emails, feedback forms, and customer analytics.

Accordingly, firms that include information from SMT will develop a higher level of MC. Social media ties are vital channels of informational, reputational, and experiential capabilities that support international branding. Thus, SMT can support users' social, emotional, and transactional exchanges with brands (Gao et al. 2018). SMT differ from traditional methods of consumer engagement since communication is in real-time, faster, and with a higher number of customers, and firms' product development is supported by customers' engagement, and insights can be generated and analysed from firms' SMT (Rathore et al. 2016).

SMT represent an opportunity for MNEs to understand how consumers think and feel about their products or services. Firms use SMT to improve their MC, such as market sensing, branding, and customer relationship. Thus, organisations' SMT skills are considered as a strategic capability that drives competitive advantage due to specific individuals' social media skills within the organisation and its routine deployment as firm-specific social media interactions' skills (Bolat, Kooli & Wright 2016). SMT have the potential to improve firms' branding capabilities, and the practical usage supports MNEs' branding activities through traffic generation, viral marketing, customers' retention, and advocacy. The online platforms improve company revenues through instant sales, better customer services, and efficient product development (Culnan, McHugh & Zubillaga 2010). SMT support firms' brand-building through its effect on brand awareness and popularity during the cognitive stage and impact brand satisfaction and attachment during the affective stage. Thus, SMT emphasise brand loyalty and purchase intentions (Moro, Rita & Vala 2016). The availability of multiple online social media touchpoints supports the company's knowledge generation and dissemination through interactions and engagement of its customers all over the world. Lemon and Verhoef (2016) explore customer experience in the presence of multiple touchpoints during the digital age and argue the role of SMT to understand how customers engage from the initial search of services or products until the post-purchase stage. Social and cultural

factors can be studied to understand perception, attitude, and purchase intention, and SMT facilitate consumer engagement and highlight social and cultural factors that affect the purchase evaluation and decisions. Moreover, SMT support knowledge diffusion of customer-brand relationship interactions. The platform metrics facilitate data analysis, and the adoption and channel analysis explain a faster organisation response in changing environment and foreign markets as results of higher interactions, customers' engagement, and market knowledge (Nguyen et al. 2015).

In addition to external SMT adoption, the internal use within the firm might improve internal organisational communication and knowledge sharing between MNEs' parent and subsidiaries. Leonardi, Huysman and Steinfield (2013, p.2) define enterprise social media as: "Web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organisation; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organisation at any time of their choosing." Accordingly, SMT are unique communication tools that provide learning environments to employees since information can be seen, edited, and stored by anyone in the firm. The author suggests that SMT usage among co-workers improves their meta-knowledge defined as who knows what and who knows whom. Thus, employees can benefit from existing ideas, reduce duplications, and enhance task performance (Leonardi 2015). Successful knowledge sharing is a precursor of success in international markets, and this process is complicated for MNEs' due to diverse and large teams. Organisational adoption of SMT for knowledge sharing encompasses the traditional mechanical transfer of information, and this technology relates the material attributes of the interactive medium to the social capital dynamics and users' network. Therefore, SMT facilitate knowledge sharing and interpretation through users' network extension and visibility and

enable users to easily locate experts who increase the findability of answers (Ellison, Gibbs & Weber 2014). Furthermore, employees of MNEs are confronted with daily communication and practices of peers from different cultures. Thus, the management of cross-cultural interaction between coworkers might enhance the performance and productivity of cross-functional teams. Hu et al. (2017) measure the impact of social media platforms on improving the individual cultural knowledge of others during cross-cultural interactions. The study suggests that multicultural experiences relate positively to individual cultural intelligence. Accordingly, a high level of cultural intelligence transforms the previous interactions to creativity and new ideas through a process of continuous learning, and SMT facilitate information acquisition and dissemination of other cultures. Therefore, it improves cross-functional communication and knowledge management, and ultimately, performance.

2.3.3 Social Media Technologies and Cultural Factors

Social media technologies (SMT) reveal firms' higher interaction with cross-cultural customers, and MNEs' capabilities of information acquisition and relationships building with culturally diversified customers are enhanced in the presence of the online social platforms. In fact, firms have the opportunity to develop new capabilities by addressing user's cultural values and engagement behaviours. Cross-cultural studies reveal differences between western and eastern individual use of social media platforms. For example, Americans use social network platforms mainly for entertainment and have five times larger networks than the Koreans. Whereas, Koreans principally use online platforms for social support and, despite fewer number of networks than Americans, they spent the same amount of time on social networking sites. The two cultures use the social network sites to find friends, seek information, entertainment, and social support. However, the weights emphasised on each motive differ significantly (LaRose et al. 2014; Kim, Sohn & Choi 2011). Another cultural aspect of being considered by MNEs is

platform design that facilitates the consumption of firms' messages by cross-cultural customers. In an attempt to study two different cultures' preference for online platforms design, Gevorgyan and Manucharova (2009) confirmed the substantial effect of consumers' culture on web participation and communication. Thus, MNEs might adapt the design of their social media platforms such as symbol, colors, and navigation to facilitate engagement of culturally different customers. For example, Americans highlight a higher positive attitude toward individualistic platforms' design that ensures privacy control and the retrieval of specific information that represents an interest to them. On the other hand, the Chinese embrace collectivist design tools that facilitate group membership and many-to-many mode of communication. MNEs can manage SMT effectively through a higher level of awareness of user behaviours and network activities of culturally different customers in different countries. For instance, Hsu et al. (2015) argue the importance of consumers' motivational factors for social media usage and explore the impact of cultural differences of five countries on consumers' social media activities. The study measures the cultural impact on entertainment, information seeking, socialisation, and self-presentation as underlying behaviors for customers' social media usage. Results show that entertainment influences social media activities in individualistic and collectivist cultures. However, the search for information is a significant motivator for individualistic cultures, higher income, and low education consumers. Socialisation and emotional support were found to be the main predictors of social media behaviours in collectivist cultures. The study concludes that self-presentation impacts collectivist culture, lower-income, and educational level, and such underlying behaviors inform firms SMT usage during communication and relationship management with international customers. For example, information seeking before travel is typical consumer behaviours in different cultures. However, the consumption, participation, and creation of online content on social media platforms before, during, and after travel highlight differences between cultures. Timing and social media usage for information search

before travel explain similarities between two countries that score reversely on cultural dimensions. However, individuals from Portugal spent more time than the United Kingdom Nationals on social media consumption. Portuguese consumers search for more information before and during travel, and they are willing to write reviews after trips and generate more content compared to English consumers (Amaro & Duarte 2017). Consumer online behaviours and cultural dimensions propose implications for international marketing. In another attempt to understand the cultural influence on social media behaviors, Arpacı and Baloğlu (2016) explore the knowledge sharing behaviours of students from collectivist cultures. The study concludes that collectivists' individuals are influenced by their national culture toward a positive attitude for knowledge sharing — also, collectivists trait impact positively subjective norms toward the same. MNEs might benefit from cross-cultural information on SMT platforms, and MC can be developed through higher knowledge of customers' needs and behaviours in foreign markets.

SMT reveals higher inter-organisational communication capabilities due to its interactive tools. Ray (2014) discusses the importance of knowledge management in MNEs for better decision-making and higher performance in international markets and highlights the role of national culture as a facilitator or inhibitor of knowledge sharing within organizations. Moreover, SMT impact the knowledge created and shared by employees from different cultures. For example, blogs serve as a motivator for individualistic cultures to participate and give advice since it gives them visibility within the firm. On the other hand, individuals from collectivist cultures can benefit from anonymous tools to comment without fear of criticism or hierarchy validation. SMT facilitate the emergence of online communities of practice, and this capability fosters relationships and emphasises the participation of experts, which is critical for low uncertainty cultures participation. Also, SMT incorporate tools such as likes, comments, and rewards to posts highly rated by coworkers. Thus, masculine cultures will be motivated to create or share knowledge

in such a competitive environment. Finally, Wikis site support knowledge dissemination and its adoption by key opinion leaders ensure usage spread in higher power distance cultures. Also, Wikipedia is a famous wiki site that allows users to create and edit articles in an open-source environment for information seeking while using different languages. The content analysis of different cultures' behaviors highlights significant differences. For example, cultures with high scores on power distance, such as the French nationals, do not engage in the deletion of information or links. Moreover, the addition of information is negatively correlated with individualistic cultures as opposed to high masculinity and uncertainty avoidance (Pfeil, Zaphiris & Ang 2006). MNEs can minimise errors in communication and develop SMT that foster information sharing while taking into consideration the cultural behaviours of stakeholders in different countries of operation. Thus, firms SMT adaptation reveals productive cross-functional activities across MNEs functions in different countries.

MNEs SMT might facilitate a better understanding of cross-culture attitudes and perceptions toward the brand or services. Pentina, Zhang and Basmanova (2013) shed light on consumers' brand social media trust concept in two different cultures. The research highlights that trust is a predictor of brand loyalty, relationship quality, and purchase intention in offline settings. Whereas, online platforms need further evaluation of message trustworthiness since such an environment is more complicated in privacy and security issues. The study uses a microblogging platform Twitter to understand cultural differences between Americans and Ukrainians in brand trust transfer from the platform itself to the brand or company that has a page on the Twitter social media network. Results explain that the two cultures trust Twitter as an online platform, and they have the intention to maintain their usage and recommend it to others as well. However, brand trust transfer differs significantly between the two cultures. As high context characters, Ukrainians positively trust the hosted brands on Twitter since they trusted the platform itself initially. Whereas, Americans are low context character culture and expect a direct

connection to transfer their trust from the platform itself to the hosted brand page. SMT present an opportunity for MNEs to initiate and maintain relationships with culturally different consumers. However, the online behaviors reveal major differences that need to be managed with caution in a cross-cultural context. Goodrich and de Mooij (2013) shed light on an essential cultural impact on online consumers' behaviours and attitudes and attempt to understand the social media activities of culturally different individuals during their purchase decision-making process. The study reveals that collectivist cultures use social media more frequently than individualistic cultures, and short-term oriented consumers from collectivist cultures are more interactive in comparison to long-term oriented collectivists, which prefer to be anonymous and passive users. Another significant result is the online engagement in negative word of mouth (WOM) by collectivists and high power distance persons. International marketers might benefit from SMT cultural usage insight, and the platform designs, messages, information, and eWOM might be adapted to answer customers' needs from different cultural backgrounds. Hudson et al. (2016) examine the influence of social media on the consumer-brand relationship, such as brand satisfaction, loyalty, love, and intimacy in three different cultures. The study explains that only higher interactions with cross-cultural customers on social media platforms are not enough for brand-consumer relationship quality. Also, it highlights the challenges of MNEs for centralisation or localisation of their social media presence and strategies across borders. The research suggests that higher social media interactions with individuals from high uncertainty avoidance cultures and who humanised the brand have more excellent relationships' quality. Also, consumers who engage with their brands on firm SMT reveal stronger relationships independently from their national culture. However, Makri and Schlegelmilch (2017) differentiate between two types of online engagement and highlight a cultural influence on how consumers actively share and post or passively browse and monitor contents. Accordingly, cultures that have a present orientation, such as the Austrian and Uruguayan

nationals, actively engage with social media sites, and the intention of active engagement and positive attitude is significantly related to the actual activities of sharing and posting in individualistic cultures as opposed to the collectivist cultures.

SMT explain a new era of MC development for MNEs in cross-cultural interactions, and the adoption of such resources and its effective management, integration, and reconfiguration with other firms' resources might enhance multiple marketing functions. SMT facilitate a better understanding of foreign customers through a more significant level of information acquisition, and the internal usage improves the cross-functional communication between co-workers and, ultimately, the dissemination of knowledge and best practices. SMT present an opportunity for MNEs to participate in co-creation of value with their customers due to its interactive tools and features and explain newer branding activities through the combination of user and firm generated content. MNEs' performance in foreign markets faces the challenges of stakeholders' cultural differences, and SMT highlight the online attitude, networks, behaviors of international stakeholders and serve as facilitators of cultural knowledge acquisition and dissemination. In conclusion, the effective integration and management of SMT might improve MNEs' communication and product management capabilities. Besides, it might enhance cross-functional operations and enable superior multiple stakeholder's management. Furthermore, SMT might improve the MNEs MC through higher and faster predictions of market trends and unmet needs of foreign customers. Accordingly, SMT might influence the performance of MNEs through its contribution to the development of international marketing capabilities.

2.4 Review of International Marketing Capabilities

2.4.1 International Marketing Capabilities Concept

MNEs' success in international markets remarkably depends on fulfilling foreign customers' needs, and resources are essential facilitators of firms' internationalisation. However, it might not be enough for competitive advantage and performance achievement in complex and changing environments such as foreign new markets. Cavusgil and Cavusgil (2011) explain that MNEs' evolution is the result of a constant search for competitive advantage. Thus, global markets suggest opportunities to grow and maintain firms' productivity. Despite the emergence of new tools for global access and open access markets for international customers, MNEs face the challenges of greater competition, strategy coordination, and management of culturally diverse markets. Accordingly, Teece, Pisano and Shuen (1997) propose firm-level capabilities that combine the development, deployment, and protection of resources and competencies to achieve competitive advantage in changing environment such as international foreign markets. This approach is defined as "dynamic capabilities" (DC) and emphasises the exploitation of internal and external firm-specific resources to cope with changing environments and gain competitive advantage. This approach extends the resource-based view (Barney 1991), which did not explain how firms deploy, combine, or reconfigure their resources for competitive advantage. Thus, DC are: "The firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments" (Teece, Pisano & Shuen 1997, p.516). Accordingly, in great market transformation, firms' DC are essential for sensing, seizing opportunities, and reconfiguring the resources for achieving strategic advantage (Teece 2007). These capabilities are fundamental to international expansion and success, and the possession of these capabilities mitigates the challenges of foreign market and enhance MNEs' dynamic learning for the achievement of competitive advantage (Luo 2000). Many years of empirical studies confirmed the link between these capabilities and firm performance (Pezeshkan et al. 2016).

In strategic marketing, Day (1994, p.37) defines capabilities as: “complex bundles of skills and collective learning, exercised through organizational processes, that ensure superior coordination of functional activities.” The research explains that assets are resources restored by the firms and used for investment in scale and scope such as brand equity. Whereas, capabilities differ from assets and refer to the advantageous deployment of these resources. These capabilities cannot be monetised, and knowledge is mainly tacit and embedded in the firms’ processes and routines. Furthermore, capabilities are classified as per their focus and orientation into three categories (Figure 9). First, inside out capabilities are activated by market demands, opportunities, and competitors. Examples are logistics processes, financial and human resources management. Second, outside in capabilities have an external focus and connect other firm capabilities to the external market. These capabilities improve the firm anticipation of market trend before the competition and creates long-term relationships with customers and other stakeholders. Third, spanning capabilities integrate the two previous processes, and it is essential for some activities such as strategy or new product development. Finally, the author argues that the importance of capabilities is their strategic contribution to the firm competitive advantage, and market-driven organisations will benefit from superior gain since their capabilities’ focus and orientation are external. Additionally, market-driven firms can develop distinctive capabilities such as market sensing and customer linking capabilities. Thus, they offer superior customer value that is difficult to imitate and enable a firm higher market position.

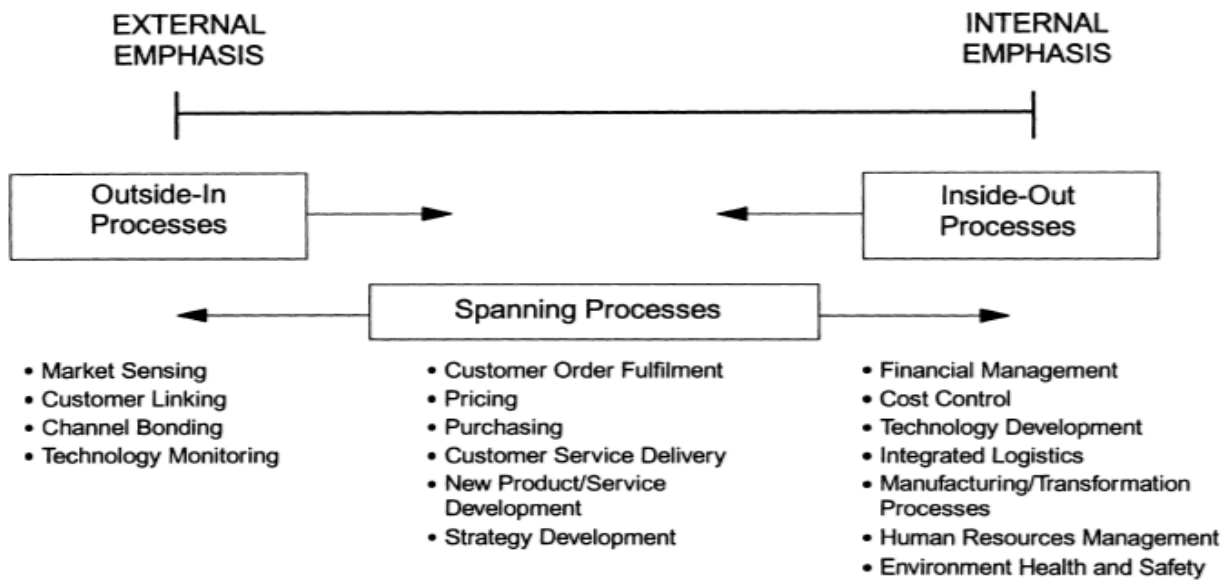


Figure 9: Classification of capabilities (adapted from Day 1994, p.41)

Day conceptualisation of capabilities captures the essence of three essential paradigms. The inside out and spanning processes reveal the critical role of firms' tangible and intangible assets that support the achievement of competitive advantage. Accordingly, this approach is grounded in the resource-based view theory (Barney 1991). The outside-in capabilities are dynamic and sensitive to market changes and inform the integration of new resources and reconfiguration of older assets. Thus, this approach links to the DC concept (Teece, Pisano & Shuen 1997). Nevertheless, the distinctive market sensing and customer linking capabilities relate to the market orientation concept defined by Kohli and Jaworski (1990) as the company's capacity to generate market intelligence, disseminate knowledge through the organisational structure, and efficiently respond to customers and markets need.

Marketing scholars started to advance the conceptualisation of capabilities grounding their researches into resource-based view and dynamic capabilities paradigm. For instance, Vorhies (1998) explains that MC generally defined as the integrative processes of applying firms' tangible and intangible resources to achieve competitive advantage. Thus, the application of collective knowledge enhances the firm

products or services value. MC are developed when the firm marketing employees deploy their skills and knowledge to transform marketing inputs to outputs. Therefore, firms adapt faster than competitors to market changes and benefit from opportunities to achieve competitive advantage — the study empirically concluded that MC transform MNEs business strategies and information processes capabilities into higher organizational effectiveness. Other researchers attempt to differentiate between MC type and function. For example, Bruni and Verona (2009, p.7) explain that dynamic marketing capabilities (DMC): “reflect human capital, social capital, and the cognition of managers involved in the creation, use, and integration of market knowledge and marketing resources in order to match and create market and technological change.” Accordingly, DMC enable the evolution of the firms and differ from static marketing capabilities (SMC) since it explains the process of change and growth from stationary processes to dynamic. In fact, ordinary MC such as SMC support firms in satisfying their current customers base, advertise their brands, and exploit current products and channels. However, DMC are distinctive capabilities such as market sensing and customer linking capabilities (Day 1994). This approach is complemented by the analysis of Barrales-Molina, Martínez-López and Gázquez-Abad (2013), who suggest that new product development and market orientation are considered real DMC. This classification is based on the role of cross-functional marketing capabilities strategic influence on DC and performance. The study proposes that market knowledge and cross-functional marketing processes differentiate DMC from the general DC concept. New product development was defined as DMC since the process is initiated in the marketing department through market knowledge acquisition, dissemination, and integration within other organisational capabilities. Thus, it supports firms’ renewal of resources and capabilities, and market orientation is considered as DMC since the aim of this capability is to generate, disseminate market knowledge, and inform firms’ cross-functional coordination.

International markets are complex and represent a changing environment for MNEs. The DC and resource-based view paradigms might ground the conceptualisation of marketing capabilities in foreign markets as in the domestic markets. International marketing capabilities are explained as “firm-level ability to use available resources to understand and fulfill foreign market customer needs better than its rivals.” Accordingly, international marketing capabilities are defined in the same way as general MC. However, the resources and processes must support customers’ value in an international context (Morgan, Feng & Whitley 2018). Marketing resources are important for success in foreign markets, and MNEs development of DMC is essential to deploy marketing assets effectively for achieving competitive advantage. Researchers started to conceptualise marketing capabilities in the international context. For instance, Fang and Zou (2009, p.743) define DMC as: “specific and idiosyncratic cross-functional business processes to create and deliver superior customer value in response to market changes.” The study highlights three main cross-functional marketing processes that influence customers’ value in foreign markets. First, new product development processes since it requires multiple functions participation in design, development, and launch. Second, customer relationship management for fulfilling customers and channel members’ needs. Third, supply chain management since it needs a successful integration with those of suppliers and customers. This conceptualisation matches the analysis of Barrales-Molina, Martínez-López and Gázquez-Abad (2013) by highlighting cross-functional marketing processes as DMC. Other capabilities differ in functions and their hierarchical nature in the international firms. For example, specialised capabilities such as pricing, advertising, product, and channel management are lower-order marketing functional capabilities that deploy specific skills and perform defined marketing activities. Architectural capabilities such as marketing strategy planning and implementation are at an intermediate level, and their roles are synchronisation and integration of multiple specialised capabilities into the whole organisation. Higher-order capabilities are market

sensing capabilities and learning processes that improve build, integrate, and reconfigure the resources in changing environments (Morgan & Slotegraaf 2012; Morgan, Feng & Whitler 2018). This classification captures the essence of Day (1994) conceptualisation. The higher-order referred to the distinctive capabilities, grounded in the DC concept, and emphasised the role of learning and processes' reconfiguration to respond effectively to market changes. On the other hand, intermediate and lower-level match with the spanning and the inside-out capabilities, and were grounded in the resource-based view theory.

International markets are complex and reveal different customers' behaviours and needs. Technological advances and disruptions highlight even faster changes in behaviours and market trends. The challenges of developing MC in the digital age are even higher for international companies that manage cross-cultural, powerful, and digitally connected consumers. Accordingly, Day (2011) extends his conceptualisation of outside-in, inside-out, and spanning capabilities (Day 1994) to include three types of capabilities: static, dynamic, and adaptive marketing capabilities grounded in four conceptual models. The previous orientation of the firms' capabilities from the inside-out or outside-in remains one of the classification dimensions, and the primary function of the capabilities as exploiting or exploring refers to the second dimension (Figure 10). Exploitation explains the creation of new knowledge about firms' existing products, markets, and capabilities. On the other side, exploration refers to the creation of new knowledge that goes beyond what is already known about capabilities, products, and markets (Vorhies, Orr & Bush 2011).

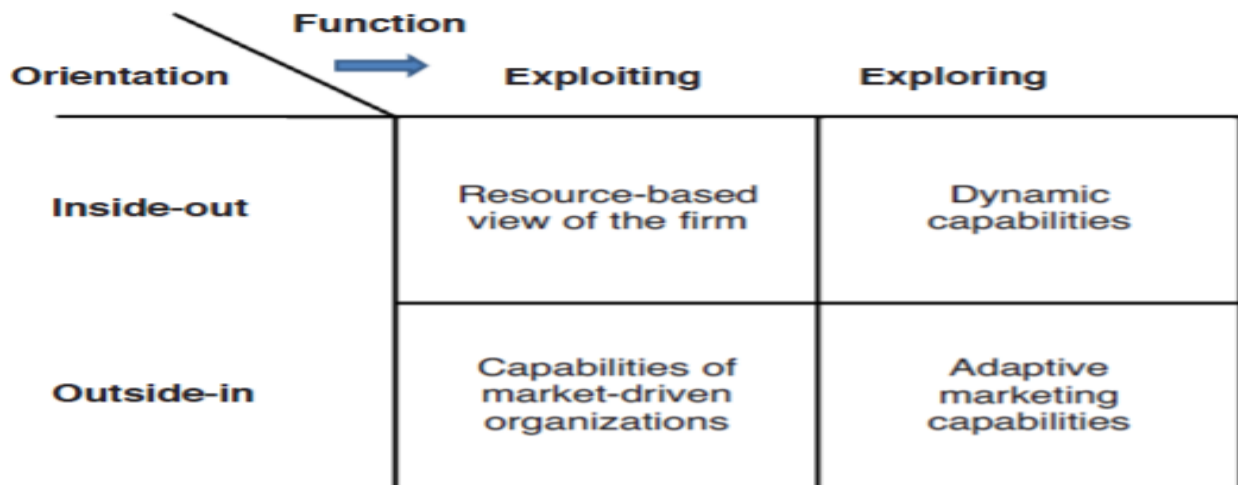


Figure 10: Capabilities classification (adapted from Day 2011, p.187)

The static marketing capabilities are grounded in the resource-based view of the organisation and have inside-out orientation, and exploitive function that improve internal processes and routines efficiency, replicability, predictability, and short-term cost reduction. The capabilities of a market-driven organisation are exploitative, and the learning system is systematic and not dynamic. Thus, these capabilities have static attributes despite an outside-in orientation. The dynamic marketing capabilities have an exploratory function, and they have implicit inside-out orientation since their actions started initially by an internal firm scanning. These well-defined and planned exploratory activities explain low sensitivity to weak market signals and describe a reactive approach to market changes. Static and dynamic marketing capabilities remain essential drivers of success. However, in a highly complex and volatile market, MNEs need newer capabilities named: “adaptive marketing capabilities” (AMC). These capabilities enable anticipation, fast learning from experimentation, and rapid reconfiguration of resources (Figure 11).

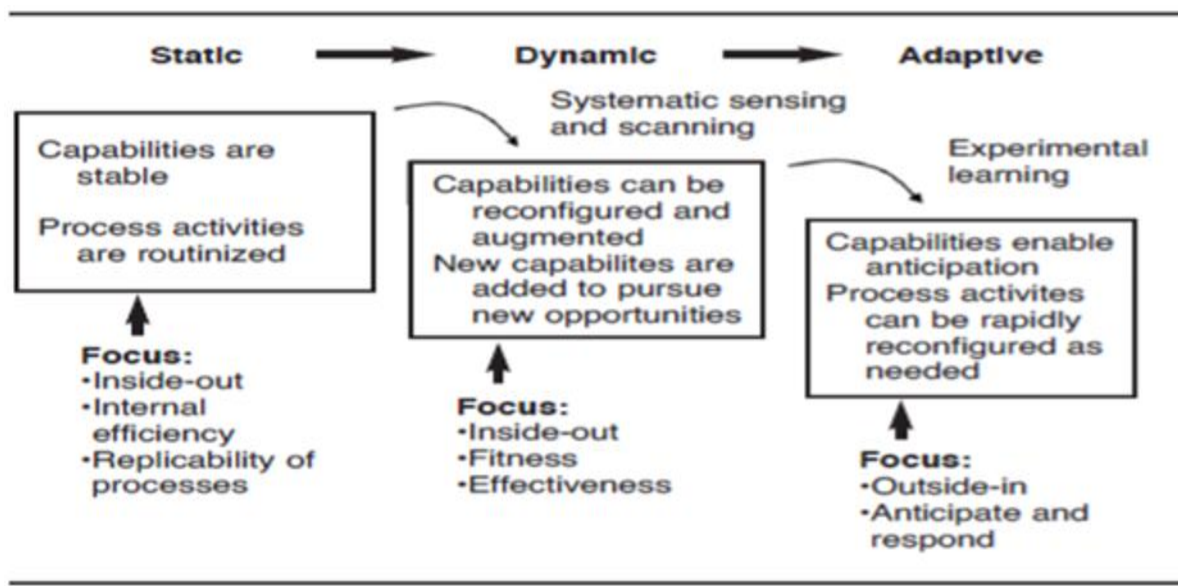


Figure 11: Focus and attributes of static, dynamic, and adaptive capabilities (adapted from Day 2011, p.188)

Marketing and strategy scholars advanced the field toward a better understanding of competitive advantage and firm performance through the conceptualisation of marketing capabilities in domestic and international markets. The static and dynamic approach to capabilities reveals important advancement in the field of international marketing theory and practice. The empirical studies grounded in resource-based view and dynamic capabilities advanced our knowledge on how such capabilities are developed and what are the expected outcomes. These theoretical frameworks might serve as a starting point to understand the development of new capabilities such as adaptive marketing capabilities in the presence of social media platforms and consumer power evolution. Accordingly, MNEs can rapidly adapt to fast market changes, complex and volatile environment. Thus, the capabilities gap might be reduced, and firms have the opportunity to achieve higher performance in international markets.

2.4.2 International Marketing Capabilities Development and Outcomes

The empirical studies followed the conceptualisation of marketing capabilities (Morgan et al. 2003; Vorhies & Morgan 2005; Fang & Zou 2009; Morgan, Katsikeas & Vorhies 2012). Researchers attempt to understand the drivers of such capabilities and how it affects firms' performance or other capabilities in an international context. For instance, Vorhies and Morgan (2005) identified eight specialised marketing capabilities that could support the implementation of marketing-mix successfully. Interviews and focus groups with top marketing managers were conducted to identify the capabilities that provide values to the firm and customers. The impact of capabilities identified, such as pricing, product management, marketing communication, channel management, and market information management, was measured against the organisations' overall performance using a cross-sectional survey and a sample of different industry types. Findings reveal the positive relationship between marketing capabilities and superior business performance, and suggest that the variance in performance is explained by the gap of marketing capabilities between top-performing firms and others. Despite the static nature, marketing-mix capabilities remain essential in delivering customer value. Accordingly, Zou, Fang and Zhao (2003) build on the 4Ps of traditional marketing and the resource-based view to understand the relationship between export performance and export marketing capabilities. Results reveal that the marketing mix capabilities such as pricing, distribution, communication, and product development capabilities influence positively export performance through the creation of low-cost and brand advantage. These static marketing capabilities enhance the firm ability to offer lower prices with better terms than competitors and describe a higher brand image than rivals, positional advantage, and export performance. In the retails export industry, firms' communication capabilities relate positively to stock performance and transform advertising and promotion resources into sales, growth, and customer satisfaction (Angulo-Ruiz et al. 2018). Drivers of performance for MNEs involved in export activities are not only pricing, advertising expenditure, or brand image of the products. Kaleka (2011) highlights the

importance of service advantage as a differentiation strategy for manufacturing companies that compete with others based on low-cost offerings in international markets. Moreover, financial and experiential resources enable firms' marketing capabilities to offer their distributors and business partners the required service advantage that might support higher performance in foreign markets. Informational, product development, and customer relationship capabilities are the drivers of this realisation. Firms' informational capabilities role is to acquire and generate knowledge of foreign markets, customers, and competitors. The knowledge dissemination highlights a high level of product development capability and customer relationship capability. In addition to capabilities role in driving service advantage, Kaleka and Morgan (2017) study the essential role of informational and product development capabilities in predicting firms' strategy directions. Accordingly, these SMC relate positively to the firm's intended decisions of following a low-cost or differentiation marketing strategy. MNEs' resources and skills might inform their strategic decisions in the foreign market. Accordingly, firms' competitiveness in the international market posits the ability to transform strategic decisions into successful actions. Morgan, Katsikeas and Vorhies (2012) argue the role of MC in translating company strategic decisions into effective and tactical resources deployment for a better understanding of the current foreign market and future forecasting. Results from surveying exporters from different industry types reveal a positive relationship between SMC, such as pricing and communication capabilities, and the effectiveness of strategy implementation in foreign markets. Thus, financial and market performance are achieved. Besides, these marketing mix capabilities facilitate the adjustments of the firms when unexpected changes occurred in the international marketplace. Technology and internet development are other factors that might influence MNEs' performance in international markets. The global internet penetration rate and speed enhancement contribute to the marketing functions and activities in creating value for cross-cultural customers. Bianchi and Mathews (2016) propose that internet integration in the MC

framework reveals beneficial value for export companies. The firms' online advertising, sales, and market research contribute positively to marketing informational capabilities, and MNEs become more knowledgeable about international market trends, clients, and competitors. This flow of information influences as well the network capabilities, and the firms fortify their relationships with existing customers and acquire new prospects. These Relational capabilities relate positively to performance and moderate the relationships between pricing, communication capabilities, and firms' performance (Pham, Monkhouse & Barnes 2017). Gregory, Ngo and Karavdic (2017) specifically suggest e-commerce marketing capabilities as important drivers of performance in the export venture. The authors reveal that different types of business to business organisations highlight a positive influence of their e-commerce marketing capabilities on distribution and promotion efficiencies in foreign markets, and ultimately, export venture performance. This result confirmed the positive and mediating role of SMC in transforming the MNEs' resources into international performance.

In a complex and changing environment, the SMC might not be sufficient for MNEs' achievement of competitive advantage. Scholars deploy the dynamic capabilities framework to develop a better understanding of DMC. For example, Morgan, Katsikeas and Vorhies (2012) explain that architectural marketing capabilities represent the processes and routine of information acquisition, interpretation, and dissemination for the development of export marketing strategies. Besides, these capabilities support firms' implementation of marketing strategies significantly, and ultimately, it improves global performance. MNEs ability to transform international market knowledge into new products or new ways of managing cross-cultural relationships is an important step toward providing superior customer value. For instance, Gumusluoglu and Acur (2016) explained the useful role of sensing, seizing, and reconfiguring capabilities on new product performance. Thus, marketing capabilities in combination with technology, can create a new product differentiated from the competition, and generating higher

product performance for organisations (Kim et al. 2016). Such interaction was studied by Song et al. (2005) who explained the complementarity effect of marketing and technological capabilities to achieve performance in the different environmental contexts. Also, Fang and Zou (2009) argue positive relations between new product development, customer relationship management, supply chain capabilities, and international performance. These DMC are inter-related and cross-functional, and serve as resources combination, integration, and response. Additionally, they refer to the initiation, creation, and deployment of superior customer value. Such capabilities need the presence of resource magnitude and complementary to be developed. Resource magnitude refers to an excessive direction of internal resources toward uncertainties. Thus, a firm can adapt rapidly to external changes. Besides, resource complementary with international stakeholders enhances information sharing and learning about foreign markets. A different group of stakeholders influence the learning processes of international new ventures and impact the nature of MC developed. Evers, Andersson and Hannibal (2012) suggest that neutral stakeholders predict the development of incremental MC such as promotion capabilities, cooperative stakeholders support the renewal of DC such as brand management, and allied stakeholders inform regenerative DC such as radical new product development. These organisational resources represent important drivers of DMC. For instance, Xu et al. (2018) attempt to understand how different types of relationship quality resources affect the development of DMC and innovation performance. This quality reflects the trust, information sharing, and joint problem solving between firms and their partners. Findings suggest that domestic firms need only vertical relationship quality to develop DMC. This relationship refers to the cooperation with suppliers and customers. However, international firms need as well as cooperation with competitors defined as the horizontal quality relationships to develop DMC in new markets. Additionally, the results confirm the DMC's positive influence on performance innovation through the deployment of firms' relationship resources. Relations are enablers of MC for

entrepreneurial firms established in the emerging markets and have the intention for global expansion. Lu et al. (2010) conclude that managerial ties and institutional capital are two essential resources for performance outcomes, and the deployment of these resources is achieved through the mediation effect of information marketing capabilities and adaptive marketing mix capabilities. Wang and Feng (2012) suggest that firms' resources, such as customer orientation, customer-centric system, and information system technologies, support the development of CRM capabilities effectively. Findings reveal that firms' culture of putting customers first is transformed into performance through these capabilities. Also, the integration of organisation customer-centric and technology systems support the development of CRM capabilities. Thus, firms' capabilities of managing customers' interaction, upgrading the previous relationship, and winning a lost one predict higher performance. Different firm resources can be deployed to achieve a competitive advantage. Vorhies, Orr and Bush (2011) explore the firms' knowledge development resources as predictors of market orientation capabilities and performance. Results reveal that firms with marketing exploration and exploitation capabilities achieve higher return on assets in changing environment, and the market orientation performance relationship is mediated through CRM and brand management capabilities. This result is confirmed by Takata's (2016) empirical study of Japanese manufacturing firms over three years. Therefore, market capabilities explain the indirect effect of market orientation on company performance. Morgan et al. (2003) confirm the positive relationship between firms' knowledge management resources and performance through the mediation of marketing capabilities. The study proposes that experiential and informational knowledge of individuals and firm-level explain higher learning behaviours from experiences. Thus, this accumulated know-how in different organizational level explains the development of marketing planning and implementation capabilities that ensure adaptive performance in international markets.

Since the development of the resource-based view and dynamic capabilities paradigm, many scholars shed light on how firms' resources and capabilities relate to performance in domestic or international markets. Reviews and meta-analysis confirm the positive and significant relation between marketing capabilities and performance (Tan & Sousa 2015; Krasnikov & Jayachandran 2008). Recently, Day (2011) proposes that adaptive marketing capabilities might support firm performance in a fast-changing environment, which is emphasised by rapid technology disruption, new media channels, and consumers' online power. The dimensions of adaptive marketing capabilities suggest vigilant learning, anticipation of market trends, experimentation, and open marketing through mutual and beneficial relationships with new media and social networking technologies experts. Emperically, Guo et al. (2018) find a positive correlation between AMC and firm performance in B2B firms and argue that these new capabilities predict performance higher than DMC in different turbulent environments such as technological and market turbulence or competitive intensity.

SMC, DMC, and AMC are essential drivers of performance in international markets, and MNEs need to understand, reconfigure, and recombine the primary resources that contribute to the development of such capabilities. Firms' knowledge of their foreign target markets' environmental factors such as cultural values of international stakeholders, technological and market turbulence might be beneficial for improving the relationship between these capabilities and performance.

2.4.3 International Marketing Capabilities and Environmental Factors

MNEs seek new markets for maintaining productivity, achieving growth, and improving profitability. Globalisation emphasises firms' internationalisation, and many countries facilitate foreign investment and support different types of entry mode. Despite these opportunities, foreign markets are ambiguous

and reveal many obstacles that may attenuate the firms' success. A major and influencer factor is the cultural differences between domestic and foreign markets. Sousa and Tan (2015) argue that globalisation intensifies the competition and impacts the survival of MNEs in foreign markets, and the difference in cultural values between the headquarter and foreign affiliates might force the firms to take a strategic decision to exit an international market. Accordingly, cultural distance moderates the negative relationship between foreign affiliate performance, strategic fit, and the voluntary decision of operation inactivation. On the other hand, López-Duarte et al. (2016) integrative review confirmed the role of cultural differences in international strategic alliances performance and suggested that partner's cultural disparities influence the creation, management, and outcomes of these collaborative agreements. Fang et al. (2010) propose that marketing capabilities, such as advertising and promotion, are location-specific, and MNEs' knowledge development of international customers' preferences and characteristics is crucial for successful marketing efforts. Moreover, a deep understanding of cultural environment is critical for product and service development in foreign markets. For instance, Lee et al. (2014) find that promotional capabilities influence the brand attitude of the Korean nationals differently from the Europeans. This Result has implication on the marketing mix capabilities since it affects brand attitude and customers' decision making. Meanwhile, Petersen, Kushwaha and Kumar (2015) measure the impact of marketing communication strategies of financial service firms on customer's decisions from different cultures. The study confirms the direct relationship between national culture and customers' financial decisions. For example, long-term orientation individuals saving rates are higher than short-term oriented cultures. Besides, customers from high uncertainty avoidance cultures avoid using credit cards. On the other hand, these cultural dimensions moderate the relationship between firms' communication strategies and customers' financial decisions. Thus, firm's prevention strategies influence saving decisions highly in long-orientation cultures. However, promotion strategies predict

significantly the use of credit card in low uncertainty avoidance cultures. This result informs MNEs on how to manage their services or brands according to their influence on different cultural dimensions. According to Talay, Townsend and Yeniyurt (2015), MNEs' brand management differs in a global market due to the influence of national culture, and the firms that manage their brands' portfolios and deploy strategies that consider cultural values of different markets outperform their rivals. Findings reveal that cultural dimensions moderate the relationships between brand architectural positions and market-based performance. Thus, global brands outperform their multiregional or regional counterparts, and cultural values moderate this outcome. The Web is another tool that supports MNEs' marketing mix capabilities in the international market, and the global reach of firms' website underscores another medium to highlight product features and functionality, and communicate with global customers. Despite firms' website global reach, users' culture is an essential factor that influences the design and content characteristics. For example, cultural congruity and graphics relate to customer's attitude toward the company website and affect revisit or purchase intention (Luna, Peracchio & de Juan, 2002).

Challenges and opportunities of cultural distance impact the SMC and MNEs' marketing relationship capabilities in foreign markets. Samaha, Beck and Palmatier (2014) research argues the importance of relationship marketing capabilities and business performance and explains the success of international relations from the lens of cultural distance. A meta-analysis was conducted to understand the impact of cultural dimensions on international marketing relationships, and the findings reveal that cultures affect firms' relationship capabilities significantly during this era of a substantial increase in international trade and cross-cultural interactions. For example, relationship drivers such as communication and expertise are suppressed in individualistic cultures, and firms' strategy that relies on such enablers will not yield greater performance or buyers' word of mouth. On the contrary, collectivist cultures have a higher dependency on sellers, and firms' relationship capabilities that enhance social bonding are successful

and explain higher customers' trust and commitment. Furthermore, power distance dimension impacts as well as firms' relationship strategies and outcomes. For example, seller expertise communication significantly and positively affects customers from a higher power distance culture and increases their level of trust and commitment toward the brand or service, and ultimately, it improves performance and generates significant word of mouth. MNEs' have to consider reciprocity in their international relationship activities, and global marketing managers need to understand the influence of national cultures on their relationship activities timing and contents exchange. MNEs' adaptation of their international relationship marketing significantly relates to the relationship quality and satisfaction of international customers (Hoppner, Griffith & White 2015). Additionally, firms' cultural sensitivity reverses the negative effect of cultural distance on relationship value and predicts customers' loyalty and future purchase decisions (Skarmeas, Zeriti & Baltas 2016). This result has a major implication on firms' usage of resources and capabilities in cross-cultural interactions.

For instance, Griffith and Dimitrova (2014) study the export managers' cultural distance perception on the complementarity of capabilities and satisfaction with export performance. Results underscore a negative relationship between cultural distance and performance, and managers' perception of cultural differences moderates the effect of complementary capabilities on export satisfaction performance. Accordingly, firms involved in international operations and culturally distant markets might invest more resources to incorporate cultural information into their foreign operation. Thus, knowledge of firm stakeholders' culture enhances the link between the complementarity of capabilities and performance satisfaction. Scholars agree on the role of marketing capabilities for the success of the new product in foreign markets. However, Eisend, Evanschitzky and Calantone (2016) argue that marketing and technological capabilities contribution to the success of new product depends on the institutional context of the target countries. Accordingly, the cultural system of foreign market impacts the outcome of

marketing and technological capabilities differently. For instance, self-expression and survival values moderate the capabilities and new product performance relationship. Additionally, the higher effect of marketing over the technological capabilities increases in countries that show self-expressive, creative, and unique preferences values. These findings underline the role of culture in the effective development and deployment of MNEs international marketing capabilities and confirm the impact of foreign cultures on the capabilities-performance relationship — Wu (2013) attempts to generalise the impact of culture on marketing capabilities by extending the analysis from the developed to the emerging markets. The institutions are different in these countries and may impose different approach to MC and predict variation in performance. Finding reveals that MC predict performance in individualistic cultures significantly, and suggests that the utility of MC increases in markets highlighting specific customers' needs. Furthermore, MNEs in these markets might invest more in marketing capabilities versus other capabilities and direct and deploy resources to improve sense-making and satisfy customers' latent need. A significant factor of substantial success in an international market is the extensive knowledge of customers' needs and competitors' activities. Zahra and Georges (2002) highlighted the importance of knowledge creation and deployment for the evolution of the firm in a global context, such possession and transfer is explained by Kogut and Zander (2003) as an advantage for the substantial global investment. This firm market orientation capability reveals a competitive advantage for MNEs in international markets (Narver & Slater 1990). Also, national cultural differences between domestic and foreign markets might influence its contribution to performance. Market orientation capability supports MNEs' superior performance in regulative and normative distant markets. Whereas, this effect did not contribute to performance when culture distant increases (He, Brouthers & Filatotchev 2018). This result extends the previous body of knowledge by emphasising the effect of culture distance on firm international performance. Cultural distance underscores a contextual challenge for MNEs' marketing

capabilities effectiveness, and marketing resources knowledge transfer between parent firm and subsidiaries is confronted with cultural differences. For example, Gooderham (2007) explains the indirect effect of cultural distance on the MNEs knowledge transfer through the dimensions of cognitive and relational social capital developed between the parent firm and subsidiary. On the other hand, Ambos and Ambos (2009) argue that MNEs' knowledge transfer across organisational entities is complicated by cultural distance. The technological advancement reduces some challenges; however, cultural differences between headquarters and foreign affiliates explain the main obstacle to marketing knowledge flow. Thus, cultural distance influence the personal coordination mechanism as a useful mode of subsidiaries obtaining knowledge from MNEs' domestic country or other subsidiaries. Nevertheless, the effectiveness of marketing capabilities knowledge transfer depends on the cultural context. For example, compatible culture between MNEs' subsidiaries and their parent enables the dynamic capabilities of the recipient to acquire and disseminate the marketing knowledge of their headquarters effectively. Thus, this effective transfer of marketing capabilities supports subsidiaries performance (Fang et al. 2013).

MNEs resources and capabilities are critical for competitive advantage in foreign markets, and many years of empirical studies conclude the role of marketing capabilities in transforming resources into a competitive advantage. Meanwhile, globalisation and technological disruption present the challenges of even higher cross-cultural interactions. The contextual environment of dissimilar stakeholder's cultures impacts MNEs' resources and capabilities, and firms have to consider the cultural cues of their stakeholders when deploying resources in international markets.

On the other hand, other market conditions might influence the deployment of marketing capabilities in the global market. For instance, Olavarrieta and Friedmann (1999) argue that turbulent environment moderates the relationship between sensing capabilities and firm performance. This result might be

explained by the firm market orientation capabilities that sense the change in the environment rapidly, and adapt and respond faster than the competitors. Marketplace characteristics influence the achievement of MNEs strategic goal, and the uncertainty of the market and the fast changes in consumer behaviours and preferences widened the gap between strategic goal planning and realisation. The number of competitors and intensity of activities reveals other challenges for firms' MC usage and objectives achievement. Accordingly, strategic goals are valuable when strong marketing capabilities are deployed in a less dynamic environment (Spyropoulou et al. 2017). This result proves the argument of Song et al. (2005) that propose a weak contribution of joint venture marketing capabilities to perform in the presence of turbulent technological environments. Whereas, Fang and Zou (2009) posit that market turbulence improves the contribution of MC on performance. Firms facing turbulent environments frequently use their DMC to endure competitiveness (Wilden and Gudergan 2014). Thus, further studies are needed to empirically confirm the moderation effect of the market conditions on the relationship between MC and performance.

2.5 Review of Environmental Turbulence

The firms' environmental context impacts the relationship between marketing capabilities and performance (Day 1994; Song et al. 2005; Fang & Zou 2009; Morgan, Katsikeas & Vorhies 2012; Guo et al. 2018). These environmental changes consist of market turbulence, competitive intensity, and technological turbulence (Jaworski & Kohli 1993). Market turbulence refers to the rate of change in the composition of customers and their preferences. Competitive intensity explains the level and the condition of the competition. Technological turbulence explains the rate of technological change (Jaworski & Kohli 1993, p.57). Previous literature confirmed the influence of a turbulent environment on firms' performance. However, the results of the empirical studies were not consistent in identifying

the type of resources or capabilities affected the most and under what type of environmental turbulence. For example, Davis, Morris and Allen (1991) examine the impact of environmental turbulence on the market orientation of the firm and conclude that when the level of environmental turbulence increases, the marketing department enhances the marketing orientation activities such as improving the amount of information collected from customers. This enhancement improves firms' ability to create superior value for the customers during uncertainty. On the other hand, Slater and Narver (1994) argue that the moderation effect of the environmental turbulence on the link between market orientation and performance finds little support. This finding was supported by Baker and Sinkula (2005) who argued that market turbulence might not affect social complex resource such as market orientation and suggests that market turbulence influence the firm's necessity to act and not its competitive advantage.

According to Su et al. (2013), the reason for this conflicting outcome is the different types of environmental turbulence and the type of capabilities used. The study attempts to identify the influence of market and technological turbulence on marketing and technological capabilities. The findings outline that the two types of turbulence affect capabilities differently. While technological turbulence moderates positively the relationship between technological capabilities and performance, this relationship was impacted negatively by market turbulence. On the other hand, market turbulence influences the marketing capabilities-performance association positively. This result advances the work of Song et al. (2005), which did not test the impact of market turbulence and found that technological turbulence moderates negatively the contribution of marketing capabilities on performance.

These contradicting results inform marketing scholars to be more specific in identifying the type of capabilities and environmental turbulence under study. Day (1994) suggests that firms' outside-in approach to strategies, such as investing in market sensing and customer linking capabilities are more equipped to anticipate and respond to market changes. On the other hand, static marketing capabilities

such as the marketing mix perform only in a stable market environment (Day 2011). Many empirical studies attempt to investigate these assumptions. For example, Vorhies (1998) did not find an influence of the environmental turbulence on the development of static marketing capabilities such as promotion, product, and distribution capabilities. On the other hand, Fang and Zou (2009) propose that firms developing dynamic marketing capabilities capitalise on these opportunities to strengthen their competitive advantage and achieve higher performance in a highly turbulent market environment. The study concluded that market turbulence moderates positively and significantly the relationship between dynamic marketing capabilities and firm performance. However, a recent study by Guo et al. (2018) did not find that the relationship between dynamic marketing capabilities and firm performance is moderated under low or high levels of environmental turbulence. Besides, the research found that static marketing capabilities contribute to firm performance only under low level of environmental turbulence. However, the newer adaptive marketing capabilities were only predictors of performance in a highly turbulent environment.

This study attempts to advance the current discussion on the influence of environmental turbulence on the relationship between marketing capabilities and performance. This approach is essential to understand how the strategic posture of the firms impacts the performance in international markets. Besides, the understanding of how different types of international marketing capabilities fit with the complexity of the environment or how it complements other capabilities to achieve performance needs further investigation (Morgan et al. 2018).

2.6 Summary

Marketing scholars and practitioners recognise that social media platforms significantly influence the landscape of marketing. The dramatic changes in consumer behaviours and decision-making processes witness a new era of value creation. This chapter highlighted that MNEs' social media presence became

highly critical to understand, sense, anticipate and respond to customers' needs in international markets. The adoption of SMT improves firms' communication, pricing, product management, and marketing planning capabilities. Also, SMT affect knowledge sharing and communication between MNE's subsidiaries positively. Thus, it improves cross-functional and fast learning capabilities. Besides, globalisation and advance in technology exhibit even higher challenges for MNEs management of cross-cultural interactions. Firms cultural intelligence is a critical capability to understand customers and other stakeholders in global markets. FCI facilitates effective communication and collaboration between the parent firm and its subsidiaries and highlights a greater understanding of customer needs in international markets. This chapter concluded that cultural differences and environmental turbulence significantly impact the MNEs' marketing capabilities to transform resources into a competitive advantage and international performance.

The challenges of global markets, technological disruption, and cross-cultural interactions propose the reconfiguration and development of new marketing capabilities that contribute to MNEs' performance in international markets. Accordingly, the chapter concludes that firm cultural intelligence and the adoption of social media technologies might influence the development of static, dynamic, and adaptive marketing capabilities in international markets. The outcome of these capabilities is affected by contextual factors, and their contributions to firm performance might be moderated by environmental turbulence. This conceptualisation advances knowledge on the nature of international marketing capabilities in the new media environment and higher cross-cultural communication. This research answers the fragmented studies that measure the moderation effect of environmental turbulence on the relationship between marketing capabilities and performance. Nevertheless, it informs practitioners on how and when the development of capabilities will better contribute to firm performance in the digital age.

CHAPTER THREE

CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

3.1 Introduction

The extensive literature review of cultural intelligence and social media technologies concepts explains an association with firms' international marketing capabilities, and ultimately, MNEs' performance in foreign markets. The firm cultural intelligence and social media technologies illustrate efficient communication and cross-cultural interactions with diverse stakeholders, and these resources facilitate data analysis, knowledge transfer and distribution for more significant cross-functional activities. Firm cultural intelligence improves international relationships and MNEs' open marketing networks. On the other hand, social media technologies enhance the generation of insights from weak market signals and allow MNEs' experimentation and learning capabilities. The previous chapter highlights the influence of environmental conditions on the relationship between resources, capabilities, and firms' performance. This chapter attempts to develop the hypotheses that answer the research questions and explore the thesis objectives and presents the diagram of the conceptual framework.

3.2 Research Conceptual Framework

The conceptual framework illustrates the relations between firm cultural intelligence, social media technologies, international marketing capabilities, and firm performance. The visual diagram is based on the previous literature review conducted in chapter two, and builds on the critical analysis of cultural intelligence, social media technologies, marketing capabilities frameworks, and the development of

research hypotheses. This framework suggests that firm cultural intelligence and social media technologies drive the development of international marketing capabilities. It also proposes that the contribution of different types of capabilities to performance depends on the level of environmental turbulence in the global context.

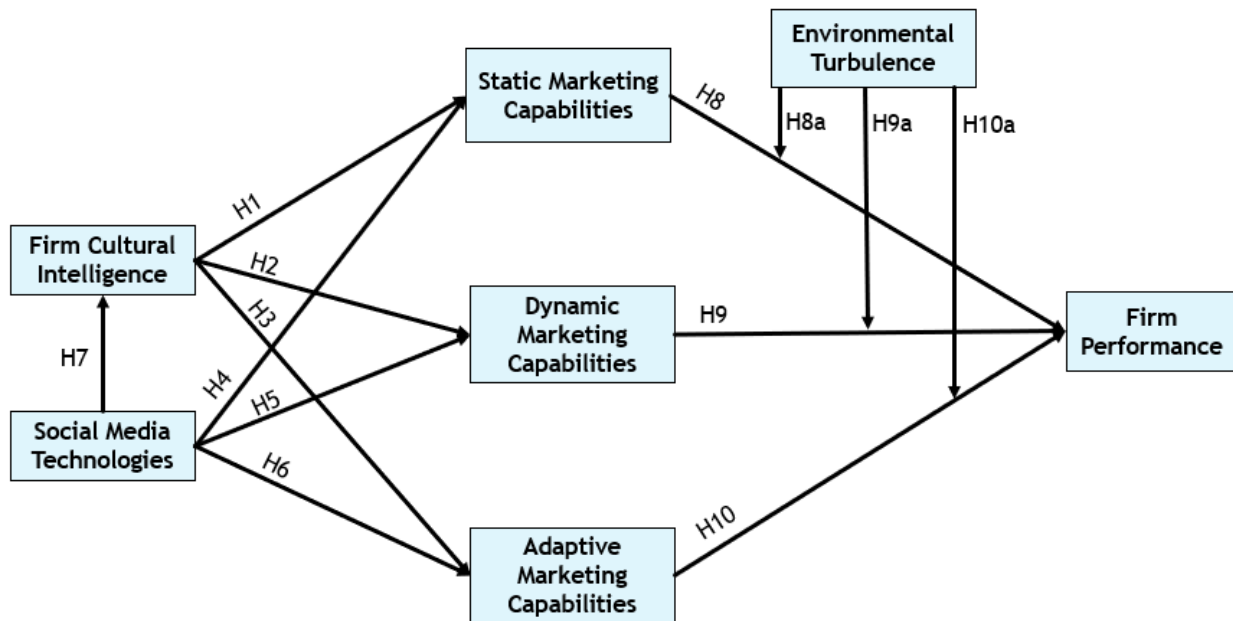


Figure 12: Research Conceptual Framework

3.3 Hypothesis development

The research proposes firm cultural intelligence (FCI) and social media technologies (SMT) as primary drivers of static (SMC), dynamic (DMC), and adaptive marketing capabilities (AMC). Moreover, the thesis measures the contribution of these marketing capabilities (MC) on MNEs' performance and how these associations are moderated under the effects of environmental turbulence. Accordingly, the sections below describe and explore these relationships.

3.3.1.1 Firm cultural intelligence and static marketing capabilities

The foreign market characteristics explain diverse customers and other stakeholders' behaviours and influence the MNEs' products and services adaptation or standardisation strategies. The heterogeneity of these markets impact firms' marketing mix strategies (Bahadir, Bharadwaj & Srivastava 2015). International customers' preferences differ from domestic markets, and cultural values have a significant impact on firms' SMC, such as pricing and communication capabilities. MNEs' firms attempt to efficiently manage resources and processes, select prices, and promote the products that create value for international customers (Vorhies 1998). Moreover, external factors such as cultural distance have a critical impact on the MNEs' marketing mix decision-making and activities (Kraus et al. 2016). Thus, firms' cultural intelligent processes and routines that consider the cultural attributes of foreign markets might predict higher offerings' success and highlight more excellent knowledge of international stakeholders (Ang & Inkpen 2008). The development of marketing mix capabilities such as pricing and communication capabilities is based on the resources that are available outside the firm, such as information about the customers (Kemper, Engélen & Brettel 2011). Since culture is an important component of customers' information, firms' cultural intelligence enhances the attainment of this cultural knowledge and support the linkage to the operations' success (van Driel & Gabrenya 2012). This acquisition and processing of information about the cultural environment support the development of marketing mix capabilities. The international business environment is sophisticated, and firms' ability to acquire and utilise relevant information remains a crucial organisational capability for international success. Accordingly, firms that possess a high level of cultural intelligence generate superior knowledge through its capabilities to understand the nature of local competition and institutional environment (Leonidou, Palihawadana & Theodosiou 2011; Charoensukmongkol, 2014). For instance, Bortoluzzi et al. (2014) explain the role of firms' capabilities and cultural knowledge accumulation for success in new

markets, and the study argues that firms' reputations in the domestic market might not influence foreign consumers' behaviors and stakeholders. Therefore, MNEs must acquire organisational capabilities such as cultural intelligence to build their brands across borders and in different environmental conditions. FCI supports MNEs' better understanding of foreign stakeholders' needs and contributes to useful sales capabilities in a diverse climate (Chen, Liu & Portnoy 2012). Furthermore, the position capability of culturally intelligent firms enhances the firms' ability to use cross-cultural information, and FCI capability creates resource position barriers and develops processes and routines that improve the connections with customers and suppliers in cross-cultural interactions (Ang & Inkpen 2008; Moon 2010; Yitmen 2013). Firm cultural intelligence facilitates the development of MNEs' marketing mix capabilities that embedded cultural cues of foreign markets. Therefore, we propose:

H1: Firm cultural intelligence is positively related to static marketing capabilities.

3.3.1.2 Firm cultural intelligence and dynamic marketing capabilities

Globalisation emphasises higher cross-cultural interactions between MNEs and their stakeholders in foreign markets, and the change in communication structures, the rise of consumer power and preferences inform even more significant challenges for MNEs' to acquire the knowledge and develop the capabilities to respond effectively to different markets' requirements (Day 2011). For instance, Javidan et al. (2005) shed light on the complexities and barriers of an efficient knowledge transfer from MNEs' subsidiaries. For example, cultural differences explain barriers to this cross-border transfer since this type of knowledge is not easily codified and culturally determined. Firm cultural intelligence emphasises a constant update of the stakeholders' cultural knowledge that is relevant to the organisation operations (van Driel & Gabrenya 2012). Thus, this form of intelligence ensures that the organisation is aware of the changes in the environment and possess the cultural information that supports a better

understanding of stakeholders' expectations and the development of effective cross-functional activities. According to Samaha, Beck and Palmatier (2014), the firms' development of a high-quality relationship with foreign stakeholders is a central focus of marketing exchange, and cultural differences affect MNEs' relationships through different encoding and exploitation of social information. Firm cultural intelligence improves MNEs' cross-cultural social interactions with international stakeholders, which might influence positively the quality of relationships and facilitate the sharing and exchange of cultural knowledge (Moon 2010). The exchange of information supports the firms' development of market orientation capabilities, which enable the tracking and responding to stakeholders' needs better than the competition (Olavarrieta and Friedmann 1999). The national culture has a direct effect on the relationship quality between MNEs and foreign partners, and cultural values influence the norm of reciprocity differently in an international relationship (Hoppner, Griffith & White 2015). For instance, Skarmeas, Zeriti and Baltas (2016) argue that MNEs' cultural sensitivity improves the relationship value with international partners, and the firm's cultural awareness enables effective interactions with foreign stakeholders. These cross-cultural interactions enable culturally intelligent firms to monitor and update their processes to match the changing environment (Ang & Inkpen 2008). Besides, these cross-cultural coordination mechanisms enhance the firms' market knowledge and support the development of dynamic marketing capabilities (Moon 2010; Barrales-Molina, Martínez-López & Gázquez-Abad 2013). According to Ang and Inkpen (2008), firm cultural intelligence enables the integration and combination of various knowledge assets within the firm and between the firm and the international stakeholders. This combination of partners' resources within culturally intelligent processes supports the development of dynamic marketing capabilities (Fang & Zou 2009). Parente, Baack and Hahn (2011) explain the importance of cross-functional activities for the development of dynamic marketing capabilities. Besides, the study suggests that cultural distance influences the MNEs' dynamic capabilities of

successfully introducing new products in new markets. Further, this marketing capability relies on strong relational ties that impact the communication and knowledge transfer processes between MNEs and their stakeholders positively (Ganesan, Malter & Rindfleisch 2005). FCI supports MNEs' integration and reconfiguration of processes in cross-cultural environments and facilitates firms learning through adequate knowledge and information acquisition and dissemination within and across organisational boundaries (Moon 2010; Yitmen 2013). This culturally intelligent processes provide the marketing department with market and stakeholders' cultural knowledge and facilitate the development of cross-functional activities. Thus, we propose:

H2: Firm cultural intelligence is positively related to dynamic marketing capabilities.

3.3.1.3 Firm cultural intelligence and adaptive marketing capabilities

The challenges of international markets increase at an exponential rate during the digital age. The technological disruption and consumer power evolution explain even more difficulties for MNEs operation and growth in foreign markets. The availability and speed of the internet highlight MNEs' more significant cross-cultural interactions with different stakeholders and propose complexities that encompass the MNEs' ability to learn and respond efficiently to the changes in the marketing landscape. Zeng et al. (2013) suggest that MNEs' fast international expansion and dispersion in different cultures relate to firms' global performance. However, the high level of international experiences and previous inferences might attenuate the learning abilities in new dissimilar cultures. Thus, MNEs must develop adaptive and intelligent mechanisms that modify previous knowledge and apply them correctly in new market settings. According to Lima et al. (2016), firm intelligence is moderated by the contextual environment and supports the adaptability and flexibility of the organizations. Accordingly, FCI supports MNEs' development of capabilities that enable the firm to operate in culturally diverse and digitally

connected environments such as virtual communities. Day (2011) sheds light on vigilant market learning as an AMC that enhances the ability of the firm to process information and respond efficiently in social spaces without preconceived judgment. Moreover, the open-minded approach and the ability to sense and acting on weak signals are critical capabilities of vigilant organizations. FCI improve these capabilities through extensive learning to integrate much data, to search for multiple cues, and to suspend their point of view for improved interactions with diverse stakeholders (Triandis 2006). Culturally intelligent firms incorporate processes that enhance cultural learning and adapt their knowledge-sharing capabilities when the stakeholders become culturally diverse (Moon 2010). Nevertheless, MNEs' leadership behaviors influence these capabilities through their creation of an open environment for learning and experimentation. These leadership teams incorporate different approaches and foster social and professional networks (Day 2011). Leaders of culturally intelligent firms modify their behaviours during cross-cultural interactions and explain awareness of cultural differences and confidence while working within new cultures (Ang & Inkpen 2008; Ang & Van Dyne 2008). Thus, FCI relates positively to these adaptive market experimentation capabilities, and cultural intelligent firms are more prepared for change through light structural control. These organisations are involved in cross-cultural learning that enhances their processes of learning and adaptation (Yitmen 2013). Hence, they are more open to partnerships with diverse stakeholders and better aligned with market reality and accelerated complexity (Day 2011). Therefore, we propose:

H3: Firm cultural intelligence is positively related to adaptive marketing capabilities.

3.3.2.1 Social media technologies and static marketing capabilities

The rise of social media platforms challenges the traditional marketing paradigm and highlights a massive change in consumer behaviours. MNEs' control of marketing mix capabilities is confronted with user-generated content, products, and services reviews, which may affect the brand's image, equity, and perceived value. On the other hand, the opportunities brought by social media technologies are enormous if deployed efficiently for co-creation of value with diverse stakeholders. According to Okazaki and Taylor (2013), SMT explain key beneficial attributes to MNEs' international communication with their customers. These factors allow faster and frequent interactions across borders, and these capabilities enhance and reinforce brand image and facilitate stakeholders' desire for cross-cultural interactions. Thus, SMT interactive communications create a positive attitude toward firms' brand messages and deliver effective advertising moderated by the influence of social ties within the networks (Shen et al. 2016). Meanwhile, Wang, Pauleen and Zhang (2016) propose that SMT improve the communication capabilities of firms through the speed of message transfer and the number of simultaneous communication. These online platforms facilitate the fine-tuning, rehearsal, and re-examination of the message before, during, and after transfer. These communication capabilities enhance sales capabilities through two-way communications with customers and improve the tracking of customers' activities and the sharing of success stories with them. Therefore, SMT encourages higher customer satisfaction through efficient information communication (Agnihotri et al. 2016). Additionally, the information acquired from social media platforms increases the competitive intelligence of the firms and informs adaptive selling capabilities (Itani, Agnihotri & Dingus 2017). The integration of these online mediums within the traditional channels inform higher MNEs' communication capabilities and have a synergistic effect with television advertising, and this impact is significantly positive with product sampling and in-store promotion (Kumar, Choi & Greene 2016). The communication capabilities of SMT extends to the international market. For instance, Gao et al. (2018) suggest that the value of SMT

remains in reducing the cost of international branding through the sharing activities within the customers' network. Accordingly, SMT enhance brand awareness and equity through the power of brand users' relational ties. The structure of these social networks emphasises trust-based relationship and greater competitiveness, and SMT generate better pricing capabilities and contribute to firms' performance through the mediation effect of its SMC (Pratono 2018; Tajvidi & Karami 2017). Thus, we propose:

H4: Firm social media technologies are positively related to static marketing capabilities.

3.3.2.2 Social media technologies and dynamic marketing capabilities

MNEs' international performance relates to their offerings, products, and services value that is co-created with firm stakeholders in the foreign market. Customers' needs and preferences in international markets differ from the domestic market and suggest efficient data generation, knowledge dissemination, and cross-functional coordination for achieving success in a dynamic environment. For instance, Trainor et al. (2013) propose that the combination of SMT and firms' CRM systems facilitates the integration of customers' information acquired from interactions and informs effective responses to various inquiries. Therefore, the use of SMT enhances MNEs' reconfiguration of resources and emphasises the development of DMC that consider emerging customers' needs and behaviours changes. SMT usage attracts customers' attention and improves their level of engagement with the firm. Thus, the accessibility and integration of customer information support a faster and innovative response to the dynamic changes in marketing environments (Wang & Kim 2017). SMT relate positively to cross-functional marketing capabilities through improving firms' CRM capabilities and enhancing the potential of creating, developing, and maintaining valuable relationships with relevant stakeholders (Foltean, Trif & Tuleu 2018). On the other hand, MNEs' cross-functional processes relate to the communication and knowledge

sharing capabilities between their headquarters and subsidiaries. According to Leonardi (2015), firms' SMT usage highlights better coordination between coworkers and emphasises the knowledge of who knows what and who within the organization network. SMT enhance cross-functional activities through greater information visibility and shared messages among other employees. These technologies create formal social communities that affect teams' productivity positively and might outperform formally structured abilities such as the previous community of practice. Huang, Singh and Ghose (2011) suggest that social and leisure contents shared within the firm SMT have positive effects on work-related knowledge creation and long-term benefit for organisations. Additionally, SMT mitigate the challenges of cross-functional communication in geographically dispersed MNEs and facilitate the knowledge flow between distributed teams. These online technologies encompass the mechanical transfer of data and allow the acknowledgment and interpretation of information with full consideration of organisational social dynamics and networks (Ellison, Gibbs & Weber 2014). SMT facilitate communication and knowledge sharing across MNEs' hierarchies and geographical boundaries (Gibbs et al. 2014). Thus, it supports the generation and integration of MNEs stakeholders' insights for the development of newer products and services that consider the changes in market dynamics, suppliers, and consumer preferences. Accordingly, SMT contribute to the efficiency and speed of MNEs' cross-functional processes that improve the responsiveness of the firm to market changes (Fang & Zou 2009). These online platforms imply a more significant understanding of stakeholders' current and unexpressed needs. Therefore, we propose:

H5: Firm social media technologies are positively related to dynamic marketing capabilities.

3.3.2.3 Social media technologies and adaptive marketing capabilities

The rise of consumer power suggests an expansion of MNEs' marketing capabilities that understand the behavioural and preference changes. The emergence of social media platforms highlights new communication patterns between MNEs and their stakeholders in foreign markets. These challenges inform the development of new capabilities that cope with the complexity of foreign markets, technological disruption, and an exceptional level of interactions. For instance, Felix, Rauschnabel and Hinsch (2017) suggest that firms' usage of SMT enhance the collaboration between stakeholders and motivate participants' information sharing. These online platforms support an open and permeable organisational culture and emphasise a flat cross-departmental structure and greater flow of market insights. These strategic SMT capabilities highlight real relationships within the MNEs' network, such as employees, customers, and other stakeholders. SMT emphasise the knowledge coordination and the dissemination of market insights between cross-functional teams and enhance the tracking of competitor's activities and the analysis of emerging trends. Thus, it contributes to the development of AMC through greater anticipation of market needs and an adequate translation of experiences, experimentation, and knowledge to respond quickly to fast-changing environments (Bolat, Kooli & Wright 2016; Day 2011). SMT analytics empower faster and efficient decision-making processes through a better understanding of firms' customers and competitors' insights (Tafesse & Wien 2018). On the other hand, SMT increase the collaboration between workgroups and highlight a continuous exchange of information without the constraints of space and time. These interactive learning experiences and up-to-date knowledge shorten the decision making processes and support MNEs' vigilant market learning through the amplification and quick sharing of customers' insights (Garcia-Morales, Martín-Rojas & Lardón-López 2018; Day 2011). Meanwhile, Muninger, Hammedi and Mahr (2019) suggest that firms' SMT provide opportunities to test, experiment, and learn faster from failures

and propose that SMT enhance strong ties within MNEs' stakeholders through active participation and strong capitalisation on firms' network experts and influencers. Thus, these platforms foster an experimental mindset and encourage open network marketing organisations (Day 2011). Therefore, we propose:

H6: Firm social media technologies are positively related to adaptive marketing capabilities.

3.3.2.4 Social media technologies and firm cultural intelligence

The social media platforms explain higher interactions between MNEs' geographically dispersed stakeholders. SMT data insights reveal important behaviors and preferences of culturally different customers, suppliers, and employees of MNEs' subsidiaries in foreign markets. Nevertheless, social media tools facilitate efficient responses and enhance relationships within the firms' culturally diverse networks. For instance, Hu et al. (2017) suggest that the use of informational and socialising social media enhances leaders' multicultural experiences. Thus, the adequate flow of information and relationships' extensions facilitate the development of cultural intelligence. Hu, Liu and Gu (2018) propose that SMT improve expatriates' self-development through their direct experiences and the observation of other successful behaviors. Therefore, SMT expand leaders' foreign cultural knowledge, self-awareness, and flexibility during cross-cultural interactions. Such usage improves organisational leaders' effective stress management within new cultures and highlights managerial self- confidence and cultural intelligence while working in new environments (Ang & Inkpen 2008). MNEs' adoption of SMT presents an opportunity to understand diverse stakeholders' cultures through the analysis of their interactions with firms' products and services, or other users within their networks. According to Goodrich and de Mooij (2013), cultural differences influence an individual's information seeking and purchase decision-making

during social media usage. SMT improve customers' engagement and encourage conversations with culturally diversified customers (Pookulangara & Koesler 2011). Thus, SMT offer a productive environment for cultural knowledge and a cross-cultural learning environment that enhances the organisations' competitive cultural intelligence (Ang & Inkpen 2008; Moon 2010). SMT usage improves MNEs' cross-cultural learning through the mitigation of knowledge transfer barriers within culturally diversified subsidiaries. These platforms allow senior managers to enhance communication, collaboration, and connections between culturally different coworkers (Chin, Evans and Choo 2015). The strategic use of social media platforms enhances shared knowledge strategies and contributes to the development of culturally intelligent processes and routines (Ray 2014; Yitmen 2013). Therefore, we propose:

H7: Firm social media technologies are positively related to firm cultural intelligence.

3.3.3.1 Static marketing capabilities, environmental turbulence, and firm performance

The foreign markets explain diversification in consumer behaviours, decision-making processes, and needs as compared to MNEs' domestic environment. The abilities to differentiate offerings from competitors through advertising and pricing capabilities produce strong brands and contribute to MNEs' profitability (Kotabe, Srinivasan & Aulakh 2002). Moreover, the capability of the firm to communicate and identify brand identity with stakeholders explains higher brand recognition and recall (Brodie, Benson-Rea & Medlin 2016). Thus, firms' development of marketing capabilities is critical for delivering value to international stakeholders. Vorhies and Morgan (2005) shed light on specific marketing capabilities based on the classic marketing mix. These SMC, such as pricing and marketing communication capabilities, contribute positively to firm overall performance. Additionally, these

capabilities support the effectiveness of marketing strategy implementation, and ultimately, firms' market and financial performance (Morgan, Katsikeas & Vorhies, 2012). Other SMC such as information acquisition and product development capabilities relate significantly to higher performance in the service industry (Kaleka 2011). Such capabilities enhance MNEs' performance through effective communication and involvement of international stakeholders during the product development processes, and transform marketing resources such as advertising and promotion expenditures into sales and profit growth (Angulo-Ruiz et al. 2018; Pham, Monkhouse & Barnes 2017). The active role of SMC in transforming MNEs' resources into performance is contextual. These capabilities are embedded within organisational processes, routines, and the surrounding environment and create barriers to replication by rivals and support firms' competitive advantage (Krasnikov & Jayachandran 2008). However, in highly competitive markets, its association with performance is likely to be negatively affected (Kaleka & Morgan 2017). According to Song et al. (2005), the high turbulence in the market attenuates the contribution of SMC to performance. These static marketing mix capabilities, strategy development, and execution capabilities might not extend to create customers' value through new channels. Thus, SMC work within accepted market conditions, and their positive impact on firm performance is hindered in highly environmental turbulence (ET) markets (Day 2011; Guo et al. 2018). Therefore, we propose:

H8: Static marketing capabilities are positively related to firm performance.

H8a: The relationship between static marketing capabilities and firm performance is weaker when the level of environmental turbulence is high than when it is low.

3.3.3.2 Dynamic marketing capabilities, environmental turbulence, and firm performance

Static marketing capabilities and dynamic marketing capabilities (DMC) theories attempt to explain firms' competitive advantage through the efficient deployment of scarce resources. However, DMC contributes higher to performance in a fast-changing environment since it allows the firm to adjust, reconfigure, and deploy the required resources to stay synchronised with the external environments (Day 2011). The firm's abilities to learn about their markets environment, customers, channels, and competitors explain dynamic capabilities and drive substantial growth. According to Brodie, Benson-Rea and Medlin (2016), firms that facilitate interactions between actors through engagement processes might produce a higher level of learning and experiences, and the organisations' continuous increase and integration of their stakeholders' knowledge within processes and routines reveal strong CRM capabilities. Thus, MNEs' focus on profitable and future potential customers improves firm performance (Morgan, Katsikeas & Vorhies, 2012). The investment in processes that create value for international customers is a dynamic capability that supports firm success in the global market, and the customers' support capabilities improve firms' learning and global performance (Khavul et al. 2010). For instance, Takata (2016) concludes that marketing capabilities outperform industry forces in their contribution to business performance, and the effect of these capabilities such as new product development is stable and robust over the years. Moreover, the efficient transfer and deployment of tacit overseas knowledge enhances MNEs transnational product development capabilities, and ultimately, the organisational performance (Subramaniam & Venkatraman 2001). According to Fang and Zou (2009), DMC explain fast and efficient business processes that facilitate the firm response to market changes and relate positively to innovation performance as an essential mechanism to understand financial and market performance (Xu et al. 2018). Marketing scholars confirm the significant and positive relationships between DMC, competitive advantage and firm overall performance (Krasnikov & Jayachandran 2008;

Barrales-Molina, Martínez-López & Gázquez-Abad 2013; Tan & Sousa 2015). However, these capabilities operate in a diverse environmental context which might influence their contribution to performance. For instance, the market turbulence moderates positively the relationship between DMC and performance (Fang & Zou 2009; Kaleka & Morgan 2017). On the other hand, the contribution of these capabilities to performance during environmental disturbance is not yet confirmed. For example, Kim, Shin and Min (2016) found that the relationship between these capabilities and new product performance is moderated positively by environmental uncertainties. However, other researchers highlight a weaker contribution within turbulent contexts (Song et al. 2005; Su et al. 2013). Recently, Guo et al. (2018) find that the impact of DMC on firm performance remains unchanged during low and high ET. Accordingly, the role of DMC is still critical for firm performance during market changes; however, the fast technological advance and the geographically dispersed MNEs' stakeholders neutralise the positive moderation of environmental turbulence on the relationship between DMC and performance (Day 2011). Therefore, we propose:

H9: Dynamic marketing capabilities are positively related to firm performance.

H9a: The relationship between dynamic marketing capabilities and firm performance is not moderated by the level of environmental turbulence.

3.3.3.3 Adaptive marketing capabilities, environmental turbulence, and firm performance

MNEs' global operations face the challenges of foreignness and the complexities of international markets. The quick introduction of new technologies, continuous changes in consumer behaviours, preferences, and needs emphasises higher barriers for firms' creation of value with international customers. According to Moorman and Day (2016), the complexities of the markets are accelerating at internet speed and highlighting a gap in the most agile firms' capabilities. Besides, the rise of multiple

touchpoints and the shrink of communication cost highlight critical risks and, at the same time, opportunities for sustaining a competitive advantage in this digital age. For example, MNEs risk the loss of stakeholders' trust without effective management of their data and privacy. On the other hand, the acquisition and analysis of information reveal a better understanding of their needs, and ultimately, improve performance (Watson et al. 2018). MNEs' might consider different approaches to deliver value for international customers in this fast-changing marketing landscape, and the development of new capabilities that integrate online marketing, data analytics, changes in consumer behaviors, and the Omni channel experiences is becoming critical for firms' success in the digital age (Moorman & Day 2016). According to Day (2011), the firms that develop marketing capabilities with an outside-in and exploration approach might achieve higher performance as compared to their rivals. This argument is confirmed by the study of Mu (2015), which sheds light on the positive relations between outside-in capabilities and performance in a fast-changing and open environment. This strategic view highlights firms' abilities in anticipating future trends, building long-term relations with stakeholders, and coordinating other partners' resources and capabilities for value creation. Nevertheless, these outside-in capabilities impact other capabilities and contribute to superior firm performance. These ADM explain faster learning abilities through new tools and experimentation processes and facilitate the extraction of critical elements and affect performance (Davenport 2009; Mu et al. 2018). According to Day and Schoemaker (2006), these newer capabilities outperform SMC and DMC in complex and high volatile markets since it acts on incomplete information and weak signals, and interacts positively and significantly with environmental turbulence to drive performance (Guo et al. 2018). Therefore, we propose:

H10: Adaptive marketing capabilities are positively related to firm performance.

H10a: The relationship between adaptive marketing capabilities and firm performance is stronger when the level of environmental turbulence is high than when it is low.

3.4 Summary

This chapter presents the relationships between different research constructs, highlights the development of hypotheses, and defines the links between the variables to answer the main study questions and objectives. This visual presentation highlights the extension of international marketing capabilities theory from the lens of two emerging paradigms: (1) firm cultural intelligence and (2) social media technologies. These two resources represent critical abilities for MNEs, and their efficient deployments might contribute significantly to the firm international performance. Accordingly, FCI and SMT are highly beneficial during the profound changes in the marketing landscape disrupted by new technologies, faster globalisation, and exceptional level of interactions between MNEs and their geographically dispersed stakeholders. Additionally, these two resources might mitigate the dual challenges of MNEs' in foreign countries represented by continuous cross-cultural interactions and digitally empowered stakeholders. This conceptual framework attempts to answer marketing scholars on the nature of marketing capabilities in the digital media age and measures the contribution of different types of capabilities on performance under different environmental settings. Accordingly, the framework proposes that culturally intelligent firms relate to international marketing capabilities through a greater level of culturally intelligent leadership and the support of structures and processes that embed culture in knowledge acquisition and dissemination, and learning systems. Besides, these capabilities are developed through the efficient integration and implementation of social media technologies that improve the firm marketing mix abilities, understanding of stakeholders' latent needs, analysis of

insights from weak signals, experimentation, and mobilisation of partners' skills. On the other hand, the framework had an essential addition to the strategic marketing paradigm, and responded to the question of when these capabilities contribute the most to MNEs' performance. In conclusion, the conceptual framework will contribute to the international marketing strategy literature through a better understanding of international marketing capabilities' drivers and outcomes under different environmental conditions.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

The first section of the methodology chapter describes the various research approaches, philosophies, and designs that allow the conduction of this thesis. The second section presents the instruments for data collection, sample characteristics, and techniques. Besides, the chapter highlights the pilot study procedures and concludes by the ethical considerations that were implemented while running this research.

4.2 Research Approach

The research approaches for theory development differ by their logic, generalizability, and the use of data collected. The two contrasting approaches are either inductive or deductive reasoning. First, the inductive approach is used for theory building and generation. The known premises and observations are deployed to explore a phenomenon, identify patterns, and build a conceptual model. Accordingly, this inductive reasoning produces untested conclusions that might support the generalisation of the results from specific to general. Second, the deductive approach verifies an existing theory through the development and evaluation of hypotheses. Thus, the data collection and analysis facilitate the generalisation of findings from general to specific and explain that a conclusion must be correct if their premises are true (Saunders, Lewis & Thornhill 2016). The thesis follows a deductive approach and evaluates relationships between three paradigms. The resource based-view and dynamic capabilities theories are established concepts in strategic marketing management, and the firm cultural intelligence and social media technologies are emerging paradigms that allow a better understanding of marketing

capabilities and firms' performance during a greater level of cross-cultural interactions and faster globalisation. According to Mantere and Ketokivi (2013), business research scholars are scientists that deploy different reasoning to relate premises with conclusions, and the rule and explanation derive observations. The thesis deductive approach explains that MNEs' FCI and SMT are resources that relate and contribute to international marketing capabilities, and ultimately, firm performance. The rule explains that resources are deployed by firms' capabilities to achieve performance. The explanation proposes that higher scores of firm cultural intelligence and efficient usage of social media technologies contribute to the development of firm-level capabilities. Thus, the conclusion highlight that MNEs' performance in international markets depends on the strength of relationships between FCI, SMT, and marketing capabilities. Operationalisation and hypotheses development are obtained from established theories. Therefore, this reasoning confirms the logical coherence of the theoretical premises and the deductive approach of the thesis (Ketokivi & Mantere 2010).

4.3 Research Philosophy

The research philosophy defines the belief system and premises that underpin the research for knowledge development. These assumptions refer to the nature of reality, the acceptable knowledge validity and reliability, and the researchers' values that impact the research processes (Saunders, Lewis & Thornhill 2016). This research explains the organisations' performance from the lens of resources and efficient processes. Thus, the thesis follows an objectivist ontology and considers the difference in organizational performance relates to the measurable facts of their resources and capabilities. Moreover, the researcher uses existing theories and follows scientific methods to develop assumptions and hypotheses. This reliance on quantifiable and observable facts to develop knowledge refers to the positivist epistemology

that underpins this research (Carson et al. 2001; Guba & Lincoln 1994). Additionally, the positivist philosophy underlines the detachment of the researcher from the data and explains a neutral influence toward the findings. The researcher values are not impacted by data collection and analysis processes, and value-free axiology defines the methodology of this thesis (Bryman & Bell 2015).

4.4 Research Design

4.4.1 Research strategy

The research strategy defines the plan of action to answer the research questions and links the thesis philosophy and approach to achieve consistent methods for data collection and analysis (Saunders, Lewis & Thornhill 2016). The thesis objectives are to explain the relationships between firm culture intelligence, social media technologies, international marketing capabilities, and firm performance. Thus, the strategy choice must support our understanding of how capabilities are developed and what is their contribution to firm performance, under different environmental turbulence. The widely implemented strategy in business management that relates to the deductive research approach is the use of surveys. This strategy uses a questionnaire to collect and analyses data from large samples. Nevertheless, it allows the exploration of relationships between variables and the modeling of these associations. Accordingly, the thesis adopts a cross-sectional survey to collect quantitative data, and the validity and reliability of this method improve research quality and enhance the replicability in different settings (Bryman & Bell 2015). The survey strategy underlines higher control, practical, and easy data explanation. This approach is the most frequently used in international marketing, and allows a direct method to assess the different types of capabilities in diverse countries and cultures. On the other hand, this strategy proposes many challenges, such as common method bias due to the reliance on single

informants. Besides, marketing capabilities are developed over a period of time, and primary surveys measure capabilities at one single point of time. Thus, the researcher should be cautious in explaining the causal relationships associated with these capabilities (Morgan, Feng & Whitler 2018). The availability of secondary data might mitigate the weakness of the primary survey strategy and supports the triangulation of results and increases the capabilities measurement's confidence level (Moorman & Day 2016). However, the use of perceptual performance measures complies with the requirements of validity and reliability with further caution of using a single informant (Ketokivi & Schroeder 2004). Thus, the use of subjective items to collect data of firm market performance is an alternative and useful option to overcome the challenges of secondary data availability.

4.4.2 Time horizon

This research aims to measure the contribution of different types of capabilities on firm performance under the influence of high and low environmental turbulence. The thesis explains the role of firm culture intelligence and social media technologies on the development of these international marketing capabilities. This research uses a cross-sectional survey design to understand the capabilities phenomenon during fast changes environments. Such usage is beneficial for answering the research questions and studying this particular subject at a specific point of time (Saunders, Lewis & Thornhill 2016). The thesis examines established MNEs in foreign countries, and SMT are previously available resources for these firms. Thus, the time required for capabilities development from the lens of these two resources is not an issue for this research (Kaleka & Morgan 2017). Moreover, the change of firms' capabilities over time is not an objective of this research. Hence, the longitudinal study design is not considered for this thesis.

4.4.3 Quality of research findings

The quality of research findings in quantitative methods is an important component of the thesis design and supports the researcher in reducing the probability of getting wrong answers. This research adopts measures from previous studies of FCI, SMT, marketing capabilities, environmental turbulence, and firm performance. The central scientific canon to judge the quality of quantitative research methods is reliability and validity. Reliability underlines the replication of prior research design and the consistent achievement of the same findings. Validity explains the accuracy and appropriateness of measurement used and refers to the generalisability of the findings (Saunders, Lewis & Thornhill 2016). The research is intended to measure the associations between seven constructs defined in the literature review chapter and visualise in the conceptual framework. For this research, the same developed questionnaire will be used for data collection during the same period and from the same participants. Accordingly, the measurement of two or more constructs with the same method highlighted common method bias. However, the solution to control for common method bias is the statistical tests that improve the quality of the research findings before validity and reliability constructs' measurement (Podsakoff, MacKenzie & Podsakoff 2012). Harman's single factor procedure is a common test that can be used to control for common method bias. In this test, all the variables are entered into one single factor and followed by the results of the unrotated factor solution. Thus, a one factor variance of more than 50% indicates common method bias during an exploratory factor analysis with unrotated factor solutions (Fuller et al. 2016). Additionally, the participants that responded to the research questionnaire might differ substantially from the non-responders of the sample contacted. This nonresponse bias can be resolved by using extrapolation methods that consider late responders as similar to nonrespondents and then test if any significant difference occurred between early and late respondents (Armstrong & Overton 1977). The following methodological procedures are used to establish the validity and reliability of research

measurements. According to Churchill (1979, p. 65): “a measure is valid when the differences in observed scores reflect true differences on the characteristic one are attempting to measure and nothing else. Also, a measure is reliable to the extent that independent but comparable measures of the same trait or construct of a given object agree.” As a starting point to establish the quality of measurements, the research employed factor analysis to understand the structure of seven latent variables. The factor analysis explores in a correlation matrix the maximum amount of common variance between explanatory research constructs. Moreover, this exploratory factor analysis explains the underlying variables and supports data reduction without the loss of original information (Field 2018). Accordingly, exploratory factor analysis was conducted on the research items, and factors with large eigenvalues are retained (Morgan et al. 2004). Besides, the process of factors’ extraction is followed by orthogonal varimax rotation and structure interpretation, and the variables that load with an absolute correlation value of greater than 0.4 are significant and important variables to be retained in a factor (Field 2018). Following factor analysis and questionnaire validation, the research proceeds with scale reliability tests of all study items and within the same construct. This reliability test confirms the internal consistency of the research scale by reflecting the constructs at different points of time. For this research, the Cronbach’s alpha test measures construct reliability, and the values of more than 0.70 are generally accepted to indicate the reliability of a construct (Hair et al. 2006). Additionally, the reliability of each measurement item must be measured (Fornell & Larcker 1981). Thus, the squared multiple correlations were calculated by squaring the factor loadings of each measurement and compared to a cutoff criterion of greater than 0.30 (Bagozzi & Yi 1988). These reliability tests are followed by convergent and discriminant validity. First, convergent validity proposes that the measures of specific constructs highly correlate with each other. This result is valid by achieving an average extracted variance (AVE) higher than the cutoff criteria of 0.50, and the construct reliability (CR) should be greater than 0.7 to confirm internal consistency and

convergent validity (Hair et al. 2006). Second, discriminant validity refers to the degree of difference between constructs, and a construct squared root AVE must be higher than the inter construct correlations (Fornell & Larcker 1981; Hair et al. 2006). The exploratory factor analysis (EFA) is a critical procedure to understand the structure of variables and enhances the quality of research measurements. However, this EFA should be followed by testing the goodness of fit of the specified model defined as confirmatory factor analysis (CFA). This is an initial step before evaluating and assessing the structural equation model of the research framework (Anderson & Gerbing 1988). The Chi-square (χ^2) test measures the overall goodness of fit of a hypothesised model against an alternative one with an unconstrained covariance matrix. However, the χ^2 test is sensitive to sample size and might produce potential challenges. Accordingly, a large sample size might reject a true model if it depends only on the χ^2 test (Jöreskog & Sörbom 1986). Other researchers suggest different indices to complement the χ^2 test for hypothesised model fit. For instance, Bagozzi and Yi (1988, p.79) suggest an adjusted goodness-of-fit indices test (AGFI) that refers to the variances and covariances of the model jointly. The AGFI range between 0 and 1, and a value equal or greater than 0.9 support model fit acceptance. Additionally, Schreiber et al. (2006) highlight that relative/normed chi-square (χ^2/df), Comparative Fit Index (CFI), Non-normed Fit Index (TLI), and the Root Mean Square of Approximation (RMSEA) are essential indices to indicate model fit. The accepted range for χ^2/df is between 2.0 and 3.0. The RMSEA cut-off index is less than 0.08, and TLI ranges from 0 to 1, and values closer to 1 mean greater goodness of model fit. Furthermore, a CFI value greater than 0.9 is recommended for confirming the goodness-of-model fit (Hu & Bentler 1999; Hair et al. 2006). The applications of exploratory factor analysis and confirmatory factor analysis are preliminary procedures to establish the research model goodness of fit before structural equation modeling (SEM) and path analysis. This research aims to establish causal relationships between theoretical constructs and measures the contribution of different types of capabilities on firm

performance. Thus, SEM is used for this research to model the relationships between observed measurements and their latent variables and combines path analysis models to test causal relationships between variables (Fornell & Larcker 1981). This method is standard for explaining the cause and effect relations between latent variables among marketing and business researchers. According to Hair, Ringle and Sarstedt (2011), SEM is either covariance-based (CB-SEM) or partial least squares (PLS-SEM) approach. The CB-SEM technique minimises the difference between the theoretical and the estimated covariance matrix, and requires the achievement of certain assumptions such as normality of data and the presence of minimum sample size. On the other hand, PLS-SEM maximises the latent constructs explained variance and underlines an effective estimation method when the assumptions of CB-SEM are violated, and the research objective is the prediction of structural relationships. This research aims to confirm the relationships between theoretical constructs, and the CB-SEM will be used for model estimation and hypothesis testing (Hair et al. 2012).

The research objective is to contribute to the marketing capabilities paradigm and MNEs' performance. The results of this empirical quantitative method and the contribution to the marketing strategy paradigm are strongly associated with the rigorous methodology and the quality of research findings. The thesis plan is to establish the validity and reliability of the scales measurements and examines the goodness of model fit before hypotheses testing and structural equation modeling analysis.

4.5 Measurement Scales

The extensive literature review and the previous studies that suggested or measured FCI, SMT, SMC, DMC, AMC, ET, and MP were used to develop the research questionnaire items and scales. The firm cultural intelligence construct is represented by two sub-sections and consists of 14 items suggested by

Ang and Inkpen (2008). The first sub-section is competitive cultural intelligence and underlines nine items. The second sub-section is the structural cultural intelligence and includes five items of measurements. Managers' cultural intelligence items were not included in the questionnaire since the research measurement is at the firm level, and the understanding of the cultural intelligence concept will not be similar within the heterogeneity of the respondents in this thesis. The level of theory in this research is the organisation, and the managers' characteristics are not identical. Thus, the managerial cultural intelligence may not reflect the level of theory, and the findings may not represent the relationships between the constructs at the firm level (Klein, Dansereau & Hall 1994). The rating scale is set to a 7-point Likert scale ranging from 1 as strongly disagree to 7 as strongly agree. This rating is consistent with other research constructs. The Cronbach's alpha of the scale was not available since these suggested items were not validated in the previous study. Social media technologies construct is measured through the items adapted from Tafesse and Wien (2018). The study conceptualises social media implementation as the driver of marketing strategic actions. This section of the research questionnaire consists of three sub-sections that include 12 items. The sub-sections are the social media strategy, customer engagement initiatives, and social media analytics. The Cronbach's alpha for each sub-scales was above 0.7, and the value for the whole SMT construct was 0.84, indicating acceptable reliability (Fornell & Larcker 1981; Bagozzi & Yi 1988). The scale used is a 7-point Likert scale ranging from 1 as strongly disagree to 7 as strongly agree. The initial scale for measuring social media technologies concepts was ranging from 1 as strongly disagree to 5 as strongly agree; however, the researcher expands this form of rating to 7-point Likert scale to record finer shades of opinion and reduce the measurement error since the participants are highly knowledgeable and can respond accurately to the refined scale (Saunders, Lewis & Thornhill 2016). Static marketing capabilities measurement items were adapted from Zou, Fang and Zhao (2003) and consist of 12 items that explain pricing, product

development, distribution, and communication marketing capabilities. The items of SMC were measured on a 7-point scale at “much worse than the competition” (1) and “much better than the competition” (7), and the Cronbach’s alpha for each sub-scales were above 0.7. The dynamic marketing capabilities are measured through the items adapted from Kachouie, Mavondo and Sands (2018) and underline four items that explain proactive market orientation capability. The Cronbach’s alpha of the scale was 0.89, and the items of DMC were measured on a 7-point scale at 1 as strongly disagree to 7 as strongly agree. The adaptive marketing capabilities items and scale were adapted from Guo et al. (2018), and consist of 12 items that explain vigilant market capability, adaptive market experimentation capability, and open marketing capability. The Cronbach’s alpha for every factor of the three AMC sub-scales was above 0.7, and for the whole AMC construct was above 0.87, indicating acceptable reliability (Fornell & Larcker 1981; Bagozzi & Yi 1988). The items of AMC were measured on a 7-point scale at “far below major competitors” (1) and “far above major competitors” (7). The environmental turbulence consists of 4 items adapted from Guo et al. (2018). The Cronbach’s alpha of the scale was 0.96, indicating its high reliability (Fornell & Larcker 1981; Bagozzi & Yi 1988). The construct is measured using a 7-point scale anchored at “strongly disagree” (1) and “strongly agree” (7). These items measure managers’ perception of changes in markets, customer needs, and preferences. Morgan, Katsikeas and Vorhies (2012) conceptualise marketing capabilities as the ability to transform available resources into marketing outcomes. Thus, the firm performance was measured using four items that explain market performance. These perceptual measures include market share growth, new customer acquisition, customer satisfaction, and sales growth achievement. A 7-point scale is used to measure performance anchored at (1) “far below major competitors” and (7) “far above major competitors.” See table 4.1

Table 4.1: Construct names, item codes, sources, and Cronbach’s alpha

Construct Names	Factors	Item codes	Source	Cronbach's alpha
Firm Cultural Intelligence	Competitive cultural intelligence Structural cultural intelligence	FCI1 to FCI9 FCI10 to FCI14	Ang and Inkpen (2008, p. 357)	Not Available
Social Media Technologies	Social media strategy Customer engagement initiatives Social media analytics	SMT1 to SMT4 SMT5 to SMT8 SMT9 to SMT12	Tafesse and Wien (2018, p.11)	0.85 0.82 0.91
Static Marketing Capabilities	Pricing capability Product capability Distribution capability Communication capability	SMC1 to SMC2 SMC3 to SMC6 SMC7 to SMC10 SMC11 to SMC12	Zou, Fang and Zhao (2003, p.44)	0.88 0.94 0.92 0.94
Dynamic Marketing Capabilities	Dynamic marketing capabilities	DMC1 to DMC4	Kachouie , Mavondo and Sands (2018, p. 1034)	0.89
Adaptive Marketing Capabilities	Vigilant marketing capabilities Market experimentation capabilities Open marketing capabilities	AMC1 to AMC4 AMC5 to AMC8 AMC9 to AMC12	Guo et al. (2018, p.85)	0.87 0.95 0.93
Environmental Turbulence	Market turbulence	ET1 to ET4	Guo et al. (2018, p.85)	0.96

Firm Performance	Market performance	MP1 to MP4	Guo et al. (2018, p.85)	0.96
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4.6 Data Collection Instrument

The extensive literature review of research constructs supported the development of the questionnaire items and scales for data collection. The research data collection instrument aims to measure firm cultural intelligence scores, social media technologies usages, different types of international marketing capabilities, firm performance, and environmental turbulence. The final questionnaire includes nine main sections (see appendix 4.1). The first section introduces the research purpose and objectives, and includes the consent form, researcher contact details, and it highlights the research ethics procedure for data collection and usage. The second section is related to the measurement of firm cultural intelligence construct and included two sub-sections. The third section measured social media technologies construct and consisted of three sub-sections. The fourth, fifth, sixth, seven, and eight sections are related to static, dynamic, adaptive marketing capabilities, environmental turbulence, and firm performance consecutively. The static and dynamic marketing capabilities consist of four sub-sections and one section consecutively. The AMC includes three sub-sections, and environmental turbulence consists of one section. The firm performance consists of one section, and the last section represents the descriptive variables of the MNEs, including the firm size, age of international operations, and industry type. The structure of those sections and the number of items per sub-section are highlighted in table 4.2.

Table 4.2: Questionnaire structure of research constructs

Construct name	Sub-sections	Number of items
Firm Culture intelligence	Competitive cultural intelligence	9
	Structural cultural intelligence	5
Social Media technologies	Social media strategy	4
	Stakeholder engagement initiatives	4
	Social media analytics	4
Static Marketing Capabilities	Pricing capability	2
	Product development capability	4
	Distribution capability	4
	Communication capability	2
Dynamic Marketing Capabilities	Pro market orientation capability	4
Adaptive Marketing Capabilities	Vigilant marketing capability	4
	Market experimentation capability	4
	Open marketing capability	4
Environmental Turbulence	Market turbulence	4
Firm Performance	Market performance	4

In addition to the development of items for main research constructs, the study collected data on firm size and age as control variables, since it might affect firms' performance and these variables are not of central interest for this research (Guo et al. 2018; Fang & Zou 2009). The questionnaire was designed using the online tool Joint Information Systems Committee (Jisc), which facilitated the collection and download of data for external analysis. The final questionnaire was sent online to key informants for the reason of saving time and covering different locations, and since the busy schedule of those senior managers might delay the process of data collection if it was conducted through face to face meetings and using hard copies.

4.7 Data Instrument Face validity

The objective of data instruments face validity is to ensure that the measure reflects the content of the construct in question. This procedure validates that the questionnaire items are clear, understandable, and the indicators really measure the concept in question. Thus, the participants will not be confused in answering the study questions (Saunders, Lewis & Thornhill 2016; Bryman & Bell 2015). This procedure is important for the firm cultural intelligence concept since the suggested items were not validated in previous studies, and the researcher needs at the very minimum to establish face validity for new measures (Bryman & Bell 2015). This procedure follows three stages. The first stage consists of reviewing the items measuring the firm cultural intelligence by scholars in the field of global strategy and culture. The changes proposed (see appendix 4.2) by professor Andrew Inkpen were applied to the questionnaire items suggested by his study (Ang & Inkpen 2008). For example, professor Inkpen stated that: “the biggest issue is too many of the items are double-barreled, which means they contain multiple constructs or terms in the same item questions.” The changes in the firm cultural intelligence items were followed by the second stage of face validity. The researcher sent the whole questionnaire to five scholars and five experts in the field of international marketing. The chosen academics had published several articles that advanced the marketing capabilities paradigm and knowledge. The practitioners were experienced MNEs’ regional marketing managers in different types of industries such as hospitality, healthcare, retail, and education. This procedure verifies the clarity of the questions, terminology, response formats, and identifies the questions ambiguities and performs the changes of wording according to their feedback (Morgan, Katsikeas & Vorhies 2012; Fang & Zou 2009). Thus, the measures relate to the concept that it is supposed to measure, and the participants agree on the meaning of what they are observing (Bryman & Bell 2015). The changes suggested by academics and experts in the second stage were applied to the questionnaire items. For example, the wording of some long sentences

was changed to be shorter as per the suggestions of two scholars. The item “our firm knows how to resolve cultural differences in expectations with our external regional business stakeholders” was deleted as per the recommendations of the majority of the experts. The word customer in all items that measure social media engagement initiatives sub-section was changed to stakeholders. This change is advised by marketing managers to capture not only the customers but the suppliers and the partners of MNEs as well. Finally, the third stage consists of face to face meetings with additional five MNEs’ marketing managers for additional feedback and suggestions. During the meetings, the researcher tests the duration of questionnaire completion, and confirmed that the items are clear, understandable, and measures the concepts of firm cultural intelligence, social media technologies, marketing capabilities, market turbulence, and performance.

4.8 Sample and Sampling Strategy

This research is conducted in the United Arab Emirates (UAE), which market attractiveness, regulatory environment, quality of life, and physical infrastructure such as international flight network supported the country attraction of foreign investments (Rogmans 2013). The research sample population consists of MNEs who established their regional offices in Dubai. The study of MNEs’ that manage cross-cultural regions enriches our understanding of the contextual challenges of MNEs’ capabilities development. Moreover, these representative offices are managing different countries with different cultural values, and the interactions are cross-cultural since the firms’ stakeholders are culturally diversified. The sampling frame was developed from MNEs that established a representative office in Dubai and registered at the Dubai Chamber of Commerce and Industry. The sample population consists of 454 MNEs and includes companies that operate in different industries such as energy, technology, food and

beverages, automotive, fast-moving consumer good, healthcare, insurance, and retail. This research aims to collect a valid number of questionnaires from a sufficient sample size of MNEs for the standard error of estimated parameters to be small enough and to obtain a convergent and proper solution for the estimated model (Anderson & Gerbing 1988). Moreover, this sample size is required to ensure that the confidence level is high and represents the characteristics of the target population (Saunders, Lewis & Thornhill 2016). The research used the equation $n_0 = (t)^2 * (p)(q) / (d)^2$ to calculate the minimum required sample size. The t is the value of the selected alpha of 0.05 and equal to 1.96. The p is the estimated proportion of the sample that has regional office characteristics and equal to $454/2945=0.15$ (2945 is the number of foreign companies registered in the country as per the ministry of economy in UAE). The q is equal to $1-0.15$, and d is the acceptable margin of error of 0.05 (Bartlett, Kotrlik & Higgins 2001). The result suggests that $n_0 = (1.96)^2 * (0.15) (1-0.15) / (0.05)^2 = 196$ is the minimum sample size required for this research. However, this sample size exceeds 5% of the population ($454*5\% = 23$), and the correction formula $n_1 = n_0 / (1 + n_0 / \text{Population})$ might be used to calculate the final sample size (Bartlett, Kotrlik & Higgins 2001). Thus, the final minimum sample size required is $n_1 = 196 / (1 + 196/454) = 137$.

The stratified sampling strategy was not suitable for this thesis since the comparison of marketing capabilities development between different types of industries was not the primary objective. On the other hand, the sampling strategy might be systematic random (Morgan & Kastikeas 2012) since the sampling frame is accurate, accessible, and does not include periodic pattern. Also, this strategy is suitable for all sample sizes needed (Saunders, Lewis & Thornhill 2016). However, the response rate in similar studies remains a challenge. For example, the response rate was 23.5% (Morgan, Slotegraaf & Vorhies 2009), 31% (Morgan, Vorhies & Mason 2009), 30% (Guo et al. 2018), and 39% (Morgan & Katsikeas 2012). Thus, the researcher calculated the actual sample size required based on the average

response rate of 30%. This actual sample size required is calculated using the formula: $n_2 = n_1 * 100 / re\%$ (Saunders, Lewis & Thornhill 2016). The n_1 is the final minimum sample size and equal to 137, and $re\%$ is the estimated average response rate of 30% based on previous studies. The result proposes that the actual sample size required is $n_1 = 137 * 100 / 30$ and equal to 456. Thus, the researcher decided to send the questionnaire to the overall sample population of 454 MNEs.

The sample size and adequacy are critical points to consider since it affects the significance of SEM results. Hair et al. (2014) propose that several factors might impact the adequacy of the sample size and the success of SEM, such as the number of latent variables, the number of indicators per latent variable, and the items' communalities. On the other hand, MacCallum et al. (1996) suggested that a minimum sample size of 132 is adequate to achieve a power level of 0.80 based on a close fit test if the estimated model has at least 100 degrees of freedom. For this study, the model is over identified, and the degree of freedom is higher than 100. Moreover, the number of indicators is more than three for all the latent variables, and the item communalities are higher than 0.6 (Gallagher et al. 2008; Hair et al. 2014). Besides, previous study conducted SEM with sample sizes of 85 (Vorhies 1998) and 152 (Krush, Sohi & Saini 2014) and achieved significant results. Thus, the 143 sample size of the study might be considered adequate to have sufficient data to run SEM analysis (Gallagher et al. 2008; Hair et al. 2014).

4.9 Data Collection

The data collection consists of three main stages during September, October, and November 2019. The first stage consists of searching the LinkedIn social network for regional marketing managers or director's profiles that highlight current employment for the MNEs under study. LinkedIn social networks relate to professional networking and present a potential tool to identify users' work

experiences and capabilities (Chang, Liu & Shen 2017). In the second stage, the research followed the procedures of Morgan, Katsikeas and Vorhies (2012) for key informant selection and validation of informant data. The selected MNEs' firms were contacted by telephone to confirm the name of regional marketing managers or directors identified in the first stage. This procedure is essential for the identification of potential and eligible respondents. These participants are regional marketing managers or directors responsible for MNEs' marketing resources, capabilities, and regional marketing strategies. Besides, these managers are knowledgeable of firm performance in comparison to their competitors. The third stage consists of using the professional social media platform LinkedIn to connect and invite the marketing managers to participate in this study. The objective of the researcher was to increase the response rate. The marketing managers receiving the invitation through the LinkedIn network can visualise the profile of the researcher, and the social influence and reciprocity might increase their intention to participate and exchange information (Chang, Liu & Shen 2017). This procedure was recommended by the marketing experts during the face validity stage and differs from sending emails that might be perceived as spam or received in junk emails and reduce the probability of response. Finally, the researcher sent the survey link to 434 MNEs' regional marketing managers connections and received 143 responses after three reminders. This response rate of 33% is similar to the response rate of studies conducted in international marketing research (Morgan, Vorhies & Mason 2009; Guo et al. 2018)

4.10 Data Analysis

4.10.1 Preliminary Data Analysis

The assessment of measurement model scale properties underlines the first procedure of the research data analysis before the full model test. Exploratory and confirmatory factor analysis will be conducted to establish the validity and reliability of each construct measurement that underpins the conceptual framework. The average variance extracted (AVE) for each dimension will be measured to establish convergent validity, and an AVE greater than 0.5 threshold confirms this validity. The discriminant validity will be tested to ensure the AVEs of each dimension were larger than the squared correlations between two dimensions. Finally, the reliability test will be conducted for each dimension to ensure Cronbach's alphas exceed the 0.70 acceptable reliability threshold (Fornell & Larcker 1981; Bagozzi & Yi 1988). According to Anderson and Gerbing (1988), all factor loading must explain large variance and greater AVE compared to the shared variance between research pair constructs, and the composite reliability for the seven model constructs should exceed the 0.7 cutoff criteria. Besides, the latent constructs CFA fit indices of relative/normed chi-square (χ^2/df) between 5 and as low as 2, Comparative Fit Index (CFI) greater than 0.9, Non-normed Fit Index (TLI) greater than 0.95, and the Root Mean Square of Approximation (RMSEA) lesser than 0.07 are the cutoff measures to indicate model fit (Hooper, Coughlan & Mullen 2008). Common method bias will be tested using Harman's single-factor test to ensure that no single factor of research explained more than 50% of the total variance, and the fit of a single factor model should be worse than the original measurement model, and a significant increase in Chi-square indicated that common method bias is not affecting the results of this research (Podsakoff et al. 2003).

4.10.2 Structural Equation Modelling

The final step following the establishment of psychometric properties of the constructs measurements is model hypotheses testing. The research will use maximum likelihood estimation in a structural equation

model to analyse the association between model variables, verify the hypotheses of the conceptual framework, and answer the research questions. This analysis will explain the strength and the significance of the relationships between the latent variables of the conceptual framework and highlights the contribution of different type of marketing capabilities on firm performance during different levels of environmental turbulence. Furthermore, the data analysis will inform marketing practitioners on the drivers of international marketing during the digital age of social media and greater cross-cultural interactions with foreign customers.

4.11 Ethical Considerations

The ethical consideration of conducting this research is an essential aspect of the methodology due to the influence on the researcher's credibility and quality of the findings. Many issues might confront the researcher during the data collection phase. According to Saunders, Lewis and Thornhill (2016), business management studies involve the participation of humans and highlight a challenge for data collection without possible ethical concern and the influence of social norms. Moreover, the issues of access to key participants might be explained either by a low level of perceived research value to the firm gatekeeper, or the concern of confidentiality and credibility. The researcher abides by the ethical guidelines of the British University in Dubai during the conduction of this study, and the purpose of the research was clearly highlighted to the participants. Also, the anonymity, confidentiality, voluntary participation, research associated risk, and the right to withdraw were stated in the census form. The positivist researcher seeks objectivity and remains detached from the phenomenon under study (Guba & Lincoln 1994). Thus, the researcher is neutral toward the findings and reports the results with honesty and

transparency. Additionally, the researcher ensured ethical compliance during data management, and the study conforms to the ethical considerations during data analysis and results reporting.

4.12 Summary

This chapter underlines the methodological approaches and designs that will answer the main research questions. It highlights the research strategy, design, and plan used to achieve the thesis objectives. Also, it details the processes of data instrument development and collection. The chapter presents the sample frame and strategy, highlights the data analysis procedures, and explains the ethical considerations that guided the conduction of this research.

CHAPTER FIVE

RESEARCH RESULTS

5.1 Introduction

This chapter starts with preliminary data analysis using the Statistical Package for the Social Sciences (SPSS) and concludes with hypotheses testing and mediation analysis using Analysis of Moment Structures (AMOS) software. It consists of a data preparation process such as checking missing data, assessment of data normality, variables multicollinearity, outliers, and sample descriptive statistics. Besides, this chapter includes exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), which is followed by the tests for convergent and discriminant validity. This process is essential to assess the measurement model and the quality of measures. Finally, the chapter concludes with structural model path analysis, hypotheses testing, and mediation analysis.

5.2 Preliminary Data Analysis

5.2.1 Checking Missing Values

Missing data represents the absence of valid values on one or more variables during the data preparation process. This issue represents a challenge for researchers and might affect the generalisability of the findings. The missing value analysis and the choice of imputation method represent an effective solution to understand and accommodate the missing data (Hair et al. 2014). For this study, the survey setting for data collection did not allow the completion or the registration of a result without answering all the required questions. Therefore, the procedures of missing data analysis and imputation were not conducted since the research data is complete without any missing values.

5.2.2 Checking for Outliers

Outliers constitute unique and identifiable characteristics that differ from other data observations. The presence of outliers might be problematic and can affect the findings of the research. Different methods are available to detect and handle outliers (Hair et al. 2014). For this study, the researcher used a univariate detection method to identify extreme and unique observations. This method allows the identification of outliers on each of the variables individually. The data values are converted to standard scores and values of 2.5 or higher are defined as outliers for samples of 80 or fewer observations. Whereas, this threshold value increases up to 4 for more extensive samples (Hair et al. 2014). In this research, the analysis of variables standard scores showed values below the threshold of 4. This result highlights the absence of outliers and the retention of all observations for further analysis.

5.2.3 Assessing Data Normality

The test for normality refers to the shape of data distribution for an individual variable and its similarity to the normal distribution. This assessment is a fundamental step for multivariate analysis, and the considerable variation from the normal distribution refers to invalid statistical methods (Hair et al. 2014). There are different statistical tests to assess normality. The research might use the z value of skewness and kurtosis, and if these values exceed the critical value of 2.58 at .01 significance level or 1.96 at .05, then the distribution is non-normal. Other statistical tests for normality are available as well, such as Shapiro-Wilks and Kolmogorov-Smirnov tests (Hair et al. 2014). Despite the importance of these tests to understand how the distribution differs from normality, the researcher might conclude that minor deviations from normality are significant. Thus, the visual shape of the distribution and the interpretation of skewness and kurtosis statistics are critical measures of the degree of normality (Field 2018). Besides, the study's large sample size of 143 respondents reduces the detrimental impacts of non-normality (Hair et al. 2014).

This research adopts the normal probability plot approach to assess the normality of the distribution. Also, the absolute value of skewness and kurtosis were compared to the accepted measures of less than 2 and 7 respectively suggested by Curran, West and Finch (1996). The FCI absolute value of skewness and kurtosis are -1.495 and 1.674, respectively. The SMT absolute values of skewness and kurtosis are -1.365 and 1.772, respectively. The SMC absolute values of skewness and kurtosis are -0.192 and -0.496, respectively. The DMC absolute values of skewness and kurtosis are -0.397 and 0.047, respectively. The AMC absolute values of skewness and kurtosis are -0.935 and 0.778, respectively. The MP absolute values of skewness and kurtosis are -0.774 and 0.402, respectively. Figure 13 shows that normality is not an issue for this research. The histograms are approximately bell-shaped, and the variables plotted data falls reasonably close to the diagonal line.

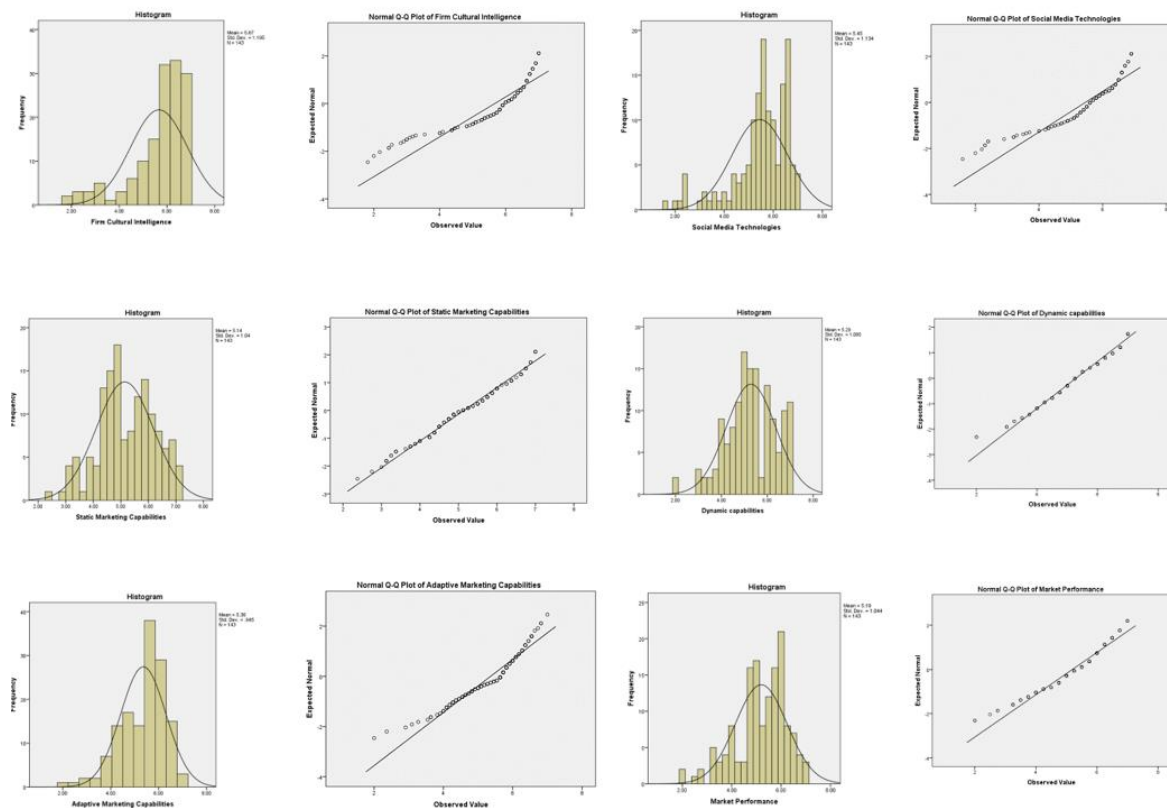


Figure 13: Distributions scores and normal Q-Q plots of research variables

5.2.4 Assessing Data Linearity and Homoscedasticity

Linearity and homoscedasticity are essential assumptions to be tested in multivariate techniques based on correlations, such as structural equation modeling (Hair et al. 2014). These two assumptions can be checked with a single graph since it relates to the residuals. The predicted values and errors are converted to z-scores, and their plotted values should not show systematic relationships (Field 2018). The scatterplot (figure 14) of the standardized residuals and standardised predicted values shows that the assumptions of linearity and homoscedasticity are met. The graph did not funnel out, and there is no sort of curve trend in the residuals (Field 2018). Further, the normal P-P plot of the standardised errors proposes that these residuals are normally distributed.

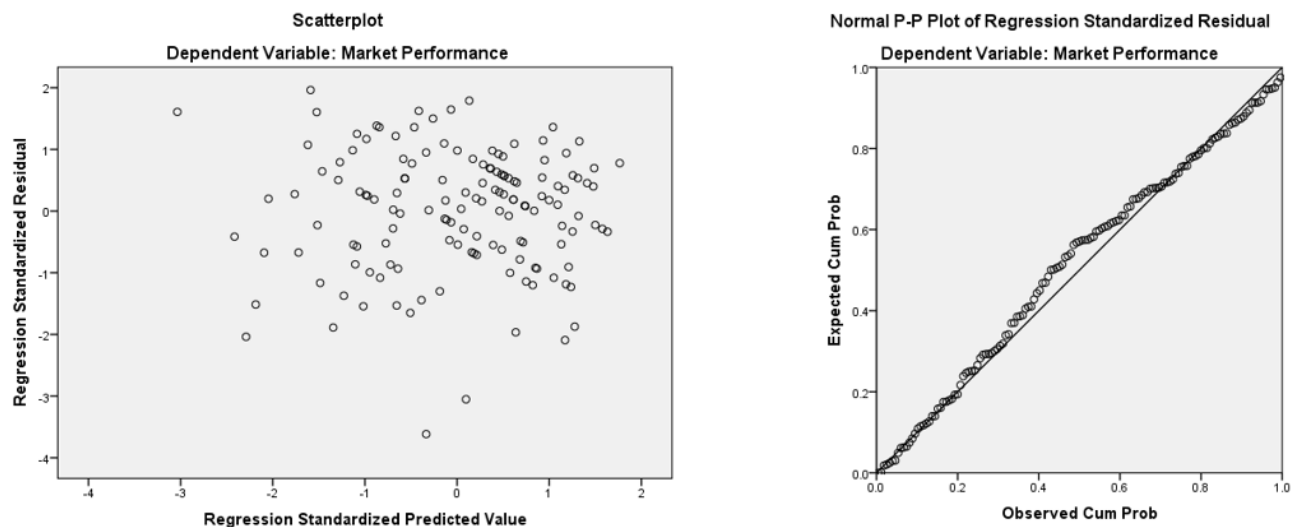


Figure 14: Scatterplot and normal P-P plot of standardised residuals

The scatterplot in figure 14 highlights as well two cases that have standardized residuals greater than 3. Thus, these observations might present bias in the model and affect the multivariate analysis. The researcher conducted case wise diagnostics, and cases 73 and 79 were proposed as potential evidence of bias. However, Cook's distance statistics (see appendix 5.1) did not cross the threshold of 1. Thus, these cases did not appear to affect the model negatively.

5.2.5 Assessing Multicollinearity

Multicollinearity refers to the strong correlations between two or more predictors. The perfect collinearity poses several problems to the model. For example, the perfectly correlated predictors increase the standard errors of the b coefficients, which leads to unstable equations across the sample. Besides, the multicollinearity between predictors limits the size of variance in the outcome and reduces the ability to assess the importance of each predictor (Field 2018). SPSS statistics can identify multicollinearity by computing the variance inflation factor and the tolerance statistic. For this research, the results of this method suggest that Multicollinearity (see appendix 5.2) is not a problem, since the variance inflation factor and the tolerance statistic met the guidelines criteria, and were below ten and above 0.1 respectively.

5.2.6 Demographic Data

In total, the completed questionnaires were 143 out of 434 (33% response rate). The study sample includes different types of industries. The firms' industry type frequency table and pie chart figure (table 5.1 and figure 15) showed that among obtained responses, the retail firms were 13 (9.1%), bank and finance 7 (4.9%), media and communication 12 (8.4%), transportation and logistics 9 (6.3%), food and beverage products 20 (14%), oil and gas 1 (0.7%), manufacturing 8 (5.6%), construction 5 (3.5%), technology 12 (8.4%), education 7 (4.9%), insurance 7 (4.9%), hospitality 10 (7.0%), healthcare 19 (13.3%), other 13 (9.1%).

Table 5.1: Firm industry type demographic data

Industry Type	Frequency	Percentage
Retail	13	9.1
Bank & Finance	7	4.9
Media & communication	12	8.4
Transportation & logistics	9	6.3

Food & beverage products	20	14
Oil & gas	1	0.7
Manufacturing	8	5.6
Construction	5	3.5
Technology	12	8.4
Education	7	4.9
Insurance	7	4.9
Hospitality	10	7.0
Healthcare	19	13.3
Other	13	9.1
Total	143	100

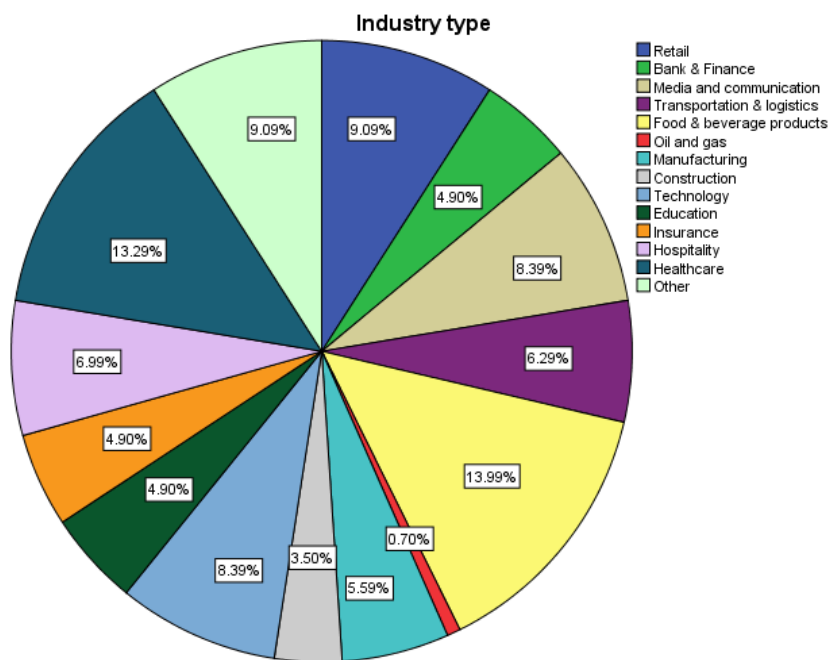


Figure 15: Pie chart of firm industry type

The firms' size frequency table and pie chart figure (table 5.2 and figure 16) showed that among obtained responses, 25 (17.5%) of the firms have less than 100 employees, 48 (33.6%) between 100 & 499 employees, 29 (20.3%) between 500 & 999 employees, and 41 (28.7%) have 1,000 or more employees.

Table 5.2: Firm size demographic data

Firm size in the region	Frequency	Percentage
Less than 100 employees	25	17.5
Between 100 & 499 employees	48	33.6
Between 500 & 999 employees	29	20.3
1,000 or more employees	41	28.7
Total	143	100

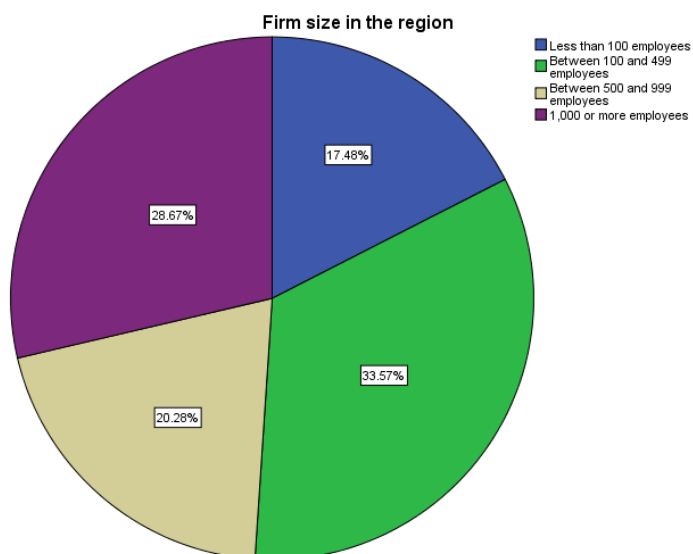


Figure 16: Pie chart of firm size in the region

The firms' experience frequency table and pie chart figure (table 5.3 and figure 17) showed that among obtained responses, 10 (7.0%) have less than three years' experience in the region, 14 (9.8%) between 3 and 5 years, and 119 (83.2%) over five years of experience.

Table 5.3: Firm experience demographic data

Firm experience in the region	Frequency	Percentage
Less than 3 years	10	7.0
Between 3 & 5 years	14	9.8
Over 5 years	119	83.2
Total	143	100

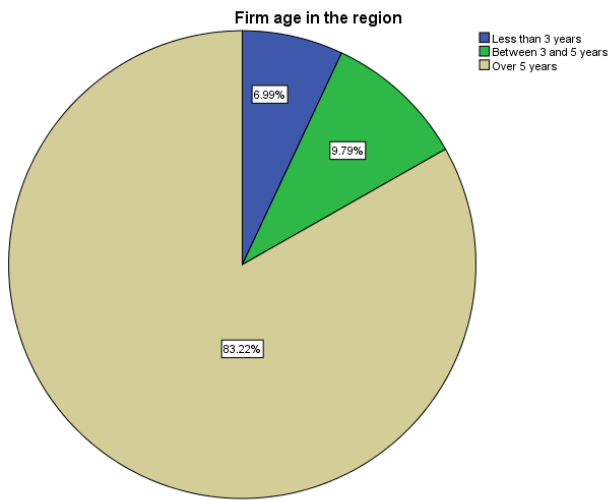


Figure 17: Pie chart of firm experience in the region

The analysis of firms' demographic data reveals essential insights for consideration during the interpretation and the analysis of research results. First, the presence of different types of industries highlights a broad representative sample. Second, the majority of the firms (93%) have more than three years of experience in the region, which reduces the weakness of a cross-sectional survey since it measures marketing capabilities at a point of time. This high percentage of experienced firms means that the effect of path dependency for capabilities development might not be a major issue for this research, and its effect on performance is minimal (Morgan, Feng & Whitler 2018).

The preliminary analysis underlines the initial procedures to understand the sample demographics and the data obtained. This analysis reveals that the assumptions for multivariate techniques are met, and the study can proceed with exploratory factor analysis.

5.3 Exploratory Factor Analysis

The objective of conducting an exploratory factor analysis (EFA) is to understand the underlying structure among the variables under study. The EFA procedure supports the researcher in managing a high number of variables and provides the tools for defining sets of highly correlated variables within groups, which are known as factors (Hair et al. 2014). The initial number of variables in this research is 62 and the EFA can be used to reduce the data, while retaining the nature and characteristics of the original variables. This data reduction relies on the contributions of each variable to the factors, named factor loadings. Thus, the factors identified to represent the original set of variables and can be used in subsequent analysis (Hair et al. 2014).

The conduction of EFA consists of multiple stages, and several criteria should be considered for successful results. The sample must have more observations than variables, and its size is preferably 100 or larger to be factored (Hair et al. 2014). This study obtained 143 responses and met the recommendations of the sample size greater than 100. Also, the observations were more than the 62 variables of the research. The following stage is to test the assumptions in factor analysis.

5.3.1 Assumptions in factor analysis

The EFA first assumption is the strong conceptual foundation of each factor structure (Hair et al. 2014). In this study, the extensive literature review and the development of the instruments process confirm the presence of a well-established theoretical foundation to perform the factor analysis. Besides, SPSS provides statistical techniques to test the assumptions of factor analysis. The significant ($p < .05$) Bartlett's test of sphericity highlights the strong correlations between the variables to proceed with the analysis. Also, the measure of sample adequacy value must be higher than .50 to confirm the degree of intercorrelations among the variables, and the readiness for factor analysis (Hair et al. 2014). Table 5.4

highlights the result of Bartlett’s test of sphericity and the measure of sample adequacy. The findings confirm that the assumptions are met, and the factor analysis can proceed to the stage of selecting the model, rotation methods, and the number of factors.

Table 5.4: Results of sample adequacy and Bartlett tests

Constructs	Kaiser-Meyer-Olkin (KMO) Sampling Adequacy	Chi-Square Test (df)	Bartlett’s Test of Sphericity (Significance Value)
FCI, SMT, SMC, DMC, AMC, MT, MP	0.897	2142.181 (1423)	.000

5.3.2 Factor Models, numbers, and rotation methods

Two factor extraction methods are available to understand the structure of the variables in the factor analysis. First, the common factor analysis considers only the shared variance of the variables, and it is used to identify underlying dimensions that reflect the common variance of the variables under study. The second method is the component analysis, which considers the total variance, and it is most appropriate to use for data reduction (Hair et al. 2014). The study EFA objective is to reduce the data and achieve the best number of factors. Thus, the component analysis was used to model the factors in this research.

The next decision is the retained number of factors. This process suggests several criteria to determine the optimal number of retained factors. The researcher can predetermine the number of factors based on previous studies or research objectives. Besides, the latent root criterion is a simple technique that considers a factor eigenvalue greater than one as significant, and to be retained. The factors that met the eigenvalue criterion of greater than one can be visualised with a scree plot test conducted with SPSS.

Finally, the retained factors should be enough to explain 60% or more of the variance in the model (Hair et al. 2014).

The number of retained factors and modeling procedures is followed by choice of factor rotation to facilitate the interpretation of the factor matrix. Two rotation methods are available to simplify the factor structure. The orthogonal rotation methods are based on the assumption of uncorrelated factors, and consist of three approaches, such as quartimax, varimax, and equimax. These approaches maximise the variable loading on a single factor, and its objective is to simplify the factor matrix rows and columns to facilitate interpretation. On the other hand, the oblique rotation methods share the same objective of the orthogonal methods and differ by allowing the possibility of correlated factors (Hair et al. 2014; Field 2018). Previous study in international marketing and capabilities explained correlations between different type of marketing capabilities and performance and between social media technologies, marketing capabilities, and firm performance (Kaleka & Morgan 2017; Vorhies & Morgan 2005; Morgan, Katsikeas & Vorhies 2012; Morgan, Vorhies & Mason 2009; Guo et al. 2018; Foltean et al. 2018). Thus, this study expects correlations between constructs, and the oblique methods with promax approach is implemented to achieve the simplest possible structure.

5.3.3 Exploratory factor analysis findings

The first attempt of exploratory factor analysis was conducted using SPSS software. The principal component analysis without a predetermined number of factors, and a promax approach to rotate the factors was used. Further, factor loadings of $\pm .50$ and higher are considered to be practically significant (Hair et al. 2014). The result of the first EFA (see appendix 5.3) explained eight components as opposed to the main number of research constructs of seven. Items FCI3, FCI14, SMC1, SMC2, AMC9, and AMC12 loaded on more than one factor. However, the only item that has a value higher than 0.5 on two

factors was SMC2. Thus, the item was removed from further analysis. The second EFA was performed, and the pattern matrix highlights eight components and item AMC9 loaded on two factors with values above 0.5 (see appendix 5.4). Thus, the item AMC9 was removed from further analysis. The third EFA (Figure 18) was conducted after the deletion of the items SMC2 and AMC9 that cross-loaded highly on two components (Hair et al. 2014).

Figure 18 shows the result of components extraction that follows the re-specification and the deletion of the problematic items. The pattern matrix consists of seven components, and all the items loaded above the threshold of .50.

Pattern Matrix ^a							
	Component						
	1	2	3	4	5	6	7
FCI1	.868						
FCI2	.784						
FCI3	.607						
FCI4	.880						
FCI5	.801						
FCI6	.857						
FCI7	.828						
FCI8	.896						
FCI9	.835						
FCI10	.816						
FCI11	.804						
FCI12	.908						
FCI13	.817						
FCI14	.836						
SMT1		.817					
SMT2		.898					
SMT3		.857					
SMT4		.821					
SMT5		.717					
SMT6		.811					
SMT7		.799					
SMT8		.837					
SMT9		.907					
SMT10		.866					
SMT11		.870					
SMT12		.882					
SMC1				.651			
SMC3				.858			
SMC4				.853			
SMC5				.807			
SMC6				.812			
SMC7				.798			
SMC8				.871			
SMC9				.742			
SMC10				.737			
SMC11				.768			
SMC12				.792			
DMC1						.810	
DMC2						.844	
DMC3						.880	
DMC4						.846	
AMC1			.754				
AMC2			.744				
AMC3			.846				
AMC4			.850				
AMC5			.830				
AMC6			.700				
AMC7			.794				
AMC8			.704				
AMC10			.739				
AMC11			.718				
AMC12			.762				
ET1					.793		
ET2					.838		
ET3					.883		
ET4					.639		
MP1							.929
MP2							.914
MP3							.621
MP4							.765

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Figure 18: Pattern matrix of components extractions

The first component consists of items FCI1, FCI2, FCI3, FCI4, FCI5, FCI6, FCI7, FCI8, FCI9, FCI10, FCI11, FCI12, FCI13, and FCI14. The second component consists of items SMT1, SMT2, SMT3, SMT4, SMT5, SMT6, SMT7, SMT8, SMT9, SMT10, SMT11, SMT12. The third component consists of items AMC1, AMC2, AMC3, AMC4, AMC5, AMC6, AMC7, AMC8, AMC10, AMC11, and AMC12. The fourth component consists of items SMC1, SMC3, SMC4, SMC5, SMC6, SMC7, SMC8, SMC9, SMC10, SMC11, and SMC12. The fifth component consists of items ET1, ET2, ET3, and ET4. The sixth component consists of items DMC1, DMC2, DMC3, and DMC4. The seventh component consists of items MP1, MP2, MP3, and MP4.

Table 5.5 highlights the components' eigenvalues and explained variance. The first component has an eigenvalue of 21.49, and the 14 items explain 35.82% of the total variance. These questions mirror the theoretical construct of firm cultural intelligence. The second component has an eigenvalue of 6.81, and the 12 items explain 11.35% of the total variance. These items mirror the theoretical construct of social media technologies. The third component has an eigenvalue of 5.81, and the 11 items explain 9.86% of the total variance. These questions mirror the theoretical construct of adaptive marketing capabilities. The fourth component has an eigenvalue of 5.06, and the 11 items explain 8.46% of the total variance. These items mirror the theoretical construct of static marketing capabilities. The fifth component has an eigenvalue of 2.05, and the 4 items explain 3.24% of the total variance. These items reflect the theoretical construct of environmental turbulence. The sixth component has an eigenvalue of 1.88, and the 4 items explain 3.14% of the total variance. These items mirror the theoretical construct of dynamic marketing capabilities. The seventh component has an eigenvalue of 1.57, and the 4 items explain 2.63% of the total variance. These items reflect the theoretical construct of firm performance.

Table 5.5: Components' variance extracted and eigenvalue

Constructs	No of Items	Factor loading	Eigen-Value	% of Variance	% of Cumulative Variance
FCI	14	.868 .784 .607 .880 .801 .857 .828 .896 .835 .816 .804 .908 .817 .836	21.493	35.822	35.822
SMT	12	.817 .898 .857 .821 .717 .811 .799 .837 .907 .866 .870 .882	6.811	11.352	47.174
AMC	11	.754 .744 .846 .850 .830 .700 .794 .704 .739 .718 .762	5.810	9.864	56.858
SMC	11	.651 .858 .853 .807 .812 .798 .871 .742 .737 .768 .792	5.061	8.436	65.294
ET	4	.793 .838 .883 .639	2.052	3.241	68.715
DMC	4	.810 .844 .880 .846	1.889	3.149	71.863
MP	4	.929 .914 .621 .765	1.579	2.631	74.494

The seven components explained 74.5% of the variance and met as well the eigenvalue criterion. The scree plot in figure 19 shows that the curve becomes approximately horizontal after component 7, and the seven components above the inspection line have eigenvalue greater than 1.

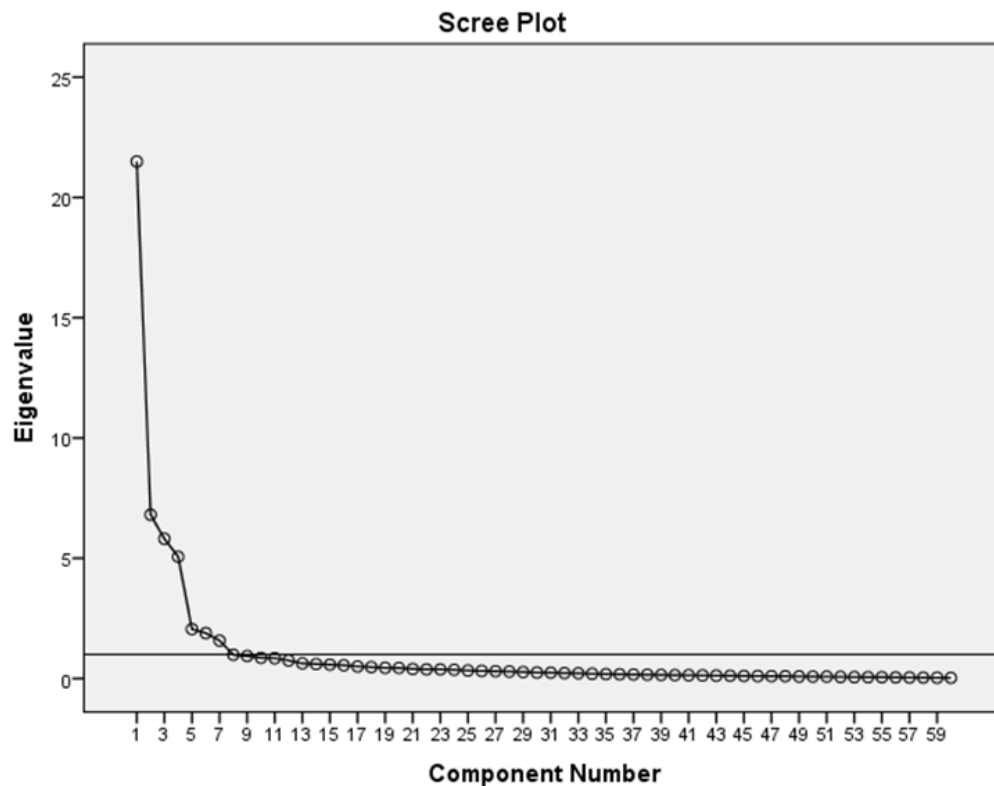


Figure 19: Eigenvalue scree plot of the exploratory factor analysis

The exploratory factor analysis using the principal component extraction model, oblique methods, and promax rotation approach underlines the presence of seven latent variables, which mirror the theoretical constructs of this study. The 60 items had significant loading factors and were reduced to seven components. Table 5.6 concludes the findings of this EFA and highlights the latent variables names, eigenvalue, variance extracted, factor loadings, codes, and statements.

Table 5.6: Summary of exploratory factor analysis findings

Latent variable name	Eigenvalue extracted	Variance extracted	Factor loading	Factor code	Factor Statement
Component 1 Firm Cultural Intelligence	21.493	35.822	.868	FCI1	Our firm values its regional public reputation
			.784	FCI2	Our firm has a process to evaluate the competitive risks of regional markets
			.607	FCI3	Our firm is able to assess the cultural compatibility of regional stakeholders
			.880	FCI4	Our firm understands that factors such as data and privacy must be evaluated in selecting regional stakeholders
			.801	FCI5	Our firm has a process to evaluate the proposed financial plan of regional offices
			.857	FCI6	Our firm has a process to evaluate the actual financial performance of regional offices
			.828	FCI7	Our firm has a process to evaluate the non-financial performance of regional offices
			.896	FCI8	Our firm has legal mechanisms to manage risks associated with proprietary firm knowledge
			.835	FCI9	Our firm has a system to exit from regional ventures with minimal business disruptions
			.816	FCI10	Our firm understands the expectations of our external regional business stakeholders
			.804	FCI11	Our firm knows how to resolve cultural differences with our external regional business stakeholders
			.908	FCI12	Our firm knows how to develop culturally appropriate standard operating procedures with our external regional business stakeholders
			.817	FCI13	Our firm knows how to design culturally appropriate governance mechanisms to ensure high performance across the operating region
			.836	FCI14	Our firm knows how to develop information sharing strategies with our external regional business stakeholders
Component 2 Social Media Technologies	6.811	11.352	.817	SMT1	We have a social media strategy that is based on the firm's key performance goals
			.898	SMT2	We have a social media strategy that provides direction for executing our social media activities
			.857	SMT3	We have a social media strategy that is closely aligned with our marketing strategy
			.821	SMT4	We have a social media strategy that offers a clear definition of our target audience
			.717	SMT5	We encourage stakeholders to interact with us in social media
			.811	SMT6	We create interesting and engaging content to stimulate engagement
			.799	SMT7	We respond actively to stakeholder engagement
			.837	SMT8	We acknowledge and reward stakeholders who engage with us

			.907	SMT9	We use social media analytics to plan and execute our social media effort
			.866	SMT10	We use social media analytics to learn about our audience
			.870	SMT11	We use social media analytics to measure our effectiveness
			.882	SMT12	We monitor relevant social media analytics
Component 3 Adaptive Marketing Capabilities	5.810	9.864	.754	AMC1	Our firm is highly sensitive to the regional market environment
			.744	AMC2	Our firm actively collects extensive marketing information through all media and social networks
			.846	AMC3	Our firm is able to forecast market trends in the region based on past history of consumer demand
			.850	AMC4	New market information is shared throughout the firm
			.830	AMC5	Our firm conducts market experiments or tests
			.700	AMC6	New business models are developed through experimentation
			.794	AMC7	Our firm learns from market experiments using new technologies
			.704	AMC8	Our firm actively learns from competitors and partners
			.739	AMC10	Through coordination and collaboration with our regional partners, we are able to achieve synergy in responding to market signals (even the weak ones) quickly and effectively
			.718	AMC11	Through resource integration with our regional partners, our firm gains the capabilities for continuous product and technology innovation
			.762	AMC12	Through collaboration and coordination with our regional partners, our firm improves its capability in developing innovative strategies and tactics
Component 4 Static Marketing Capabilities	5.061	8.436	.651	SMC1	Using pricing skills to respond quickly to competitors' pricing tactics
			.858	SMC3	Develop new products for your region to exploit our R&D investment
			.853	SMC4	Successfully launching new products for your region
			.807	SMC5	Speedily developing and launching new products for your region
			.812	SMC6	Overall new product development systems for our regional market
			.798	SMC7	Satisfying the needs of customers, suppliers and partners in this regional market
			.871	SMC8	Adding value to customers, suppliers and partners businesses
			.742	SMC9	Collaborating with customers, suppliers and partners in our regional market
			.737	SMC10	Providing high levels of support to customers, suppliers and partners

			.768	SMC11	Marketing communication skills and processes
			.792	SMC12	Effectively managing marketing communication programmes
Component 5 Environmental Turbulence	2.052	3.241	.793	ET1	In our business, customer product preferences change quite a bit over time
			.838	ET2	It is difficult to predict market and customer preference changes
			.883	ET3	It is very difficult to forecast where customer demands in our industry will be in 5 years
			.639	ET4	Constant changes in consumer demands bring hidden opportunities for our firm's business development
Component 6 Dynamic Marketing Capabilities	1.889	3.149	.810	DMC1	Our firm seeks to discover unexpressed customer needs
			.844	DMC2	Our firm develops solutions to address unexpressed customer needs
			.880	DMC3	Our firm engages with customers to find their unexpressed needs
			.846	DMC4	Our firm works closely with lead users to understand emerging needs ahead of competitors
Component 7 Firm Performance	1.579	2.631	.929	MP1	Market share growth
			.914	MP2	New customer acquisition
			.621	MP3	Customer satisfaction
			.765	MP4	Sales goal achievement

The exploratory factor analysis represents the initial step to understand the latent variables and their related factors. This procedure is followed by reliability tests and the analysis of associations between these variables.

5.4 Reliability analysis, Mean Values, and Standard Deviations

The objective of reliability tests is to ensure that the individual items of a scale measure the same construct. The assessment of the degree of consistency refers to the reliability, and different diagnostic measures are available to assess the internal consistency of a scale (Hair et al. 2014). For instance, the measure of the item-to-total correlation and the inter-item correlation might be used to assess the reliability of the measurement scale. The individual analysis (see appendix 5.5) of each variable in this study highlights correlations greater than .50 for its items to the summated scale score, and correlations

that exceed .30 among its items (Hair et al. 2014). Thus, the seven variables indicate reliable scales for measurement.

On the other hand, the Cronbach's Alpha reliability coefficient can be used to assess the scale consistency. This measure is widely used to assess the quality of the instruments, and a low coefficient alpha refers to poor items performance in capturing the construct in question (Churchill 1979). In general, the accepted value for Cronbach alpha is .7 and above. However, the unidimensionality of the constructs and a higher value of the coefficient alpha is required for the larger number of items, since reliability values increase as the number of items increase (MacKenzie, Podsakoff & Podsakoff 2011; Hair et al. 2014). The study used SPSS software to assess construct unidimensionality and calculate the Cronbach's alpha for all the variables. The principal component analyses were performed for each variable, and the results of eigenvalues (see appendix 5.6) indicate that only one component has a value greater than 1. Thus, the constructs of this research are unidimensional (Loon Hoe 2008). In addition, the result in table 5.7 shows that all research variables achieved Cronbach alpha greater than 0.7, and the measurements scale are reliable. These values are even higher for variables with a larger number of items such as firm cultural intelligence and social media technologies — table 5.7 highlights as well the mean and the standard deviation of each construct represented in this research.

Table 5.7: Means, standard deviations, and reliability analysis

Variables	Mean	Std. Deviation	Cronbach's Alpha
Firm Cultural Intelligence	5.66	1.19	0.96
Social Media technologies	5.45	1.13	0.96
Static marketing Capabilities	5.14	1.03	0.94
Dynamic Marketing Capabilities	5.29	1.08	0.95
Adaptive Marketing Capabilities	5.36	0.94	0.85
Market Turbulence	5.10	1.04	0.91
Firm Performance	5.19	0.89	0.90

5.5 Correlation

The correlation analysis supports the researcher to understand the associations between the study variables. This process underscores the strength of relationships between the research constructs and enables the researcher to understand the direction of this association (Field 2018). The strength of this relationship and the observed effect are measured numerically by analysing the correlation test using SPSS software. This coefficient of association is also named Pearson's correlation coefficient, and measures the standardised covariance between the variables; moreover, it lies between -1 and +1. The association between the variables is perfectly positive if this coefficient is +1 and perfectly negative if this coefficient is -1. However, a value of 0 indicates no linear relationship between the variables. Besides, the values of ± 0.1 , ± 0.3 , and ± 0.5 reflect small, medium, and large effects respectively (Field 2018). The assessment of the correlations coefficient impacts the estimation and the understanding of the regression findings, and better results are achieved if the correlations are significant between the research variables (Hair et al. 2014).

Table 5.8 highlights the correlations between the study variables. The result indicates that FCI correlates positively and significantly to SMT ($r=.425$, $p < .01$), SMC ($r=.524$, $p < .01$), DMC ($r=.403$, $p < .01$), AMC ($r=.258$, $p < .01$), and MP ($r=.439$, $p < .01$). The SMT correlates positively and significantly to SMC ($r=.468$, $p < .01$), DMC ($r=.437$, $p < .01$), AMC ($r=.311$, $p < .01$), and MP ($r=.364$, $p < .01$). SMC correlates positively and significantly to DMC ($r=.608$, $p < .01$), AMC ($r=.389$, $p < .01$), and MP ($r=.411$, $p < .01$). DMC correlates positively and significantly to AMC ($r=.425$, $p < .01$) and MP ($r=.362$, $p < .01$). Finally, AMC correlates positively and significantly to MP ($r=.543$, $p < .01$).

Table 5.8: Correlation table of study variables

	FCI	SMT	SMC	DMC	AMC	MP	ET
--	-----	-----	-----	-----	-----	----	----

FCI	1						
SMT	.425**	1					
SMC	.524**	.468**	1				
DMC	.403**	.437**	.608**	1			
AMC	.258**	.311**	.389**	.452**	1		
MP	.439**	.364**	.411**	.362**	.543**	1	
ET	.271**	.165*	.016	.056	.369**	.292**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

5.6 Common Method Bias

The measurement of two or more constructs with the same method could inflate or deflate the estimates between the latent variables. This bias exists if the research involved only one method of measurement, such as a self-reported questionnaire (Podsakoff, MacKenzie & Podsakoff 2012). For this research, the option of collecting secondary data as a second source might be an effective measure to control for common method bias. However, the data confidentiality and the lack of database that provides such information remain a challenge for this method of data collection. In this study, the researcher proactively attempts to minimise the risk of common bias during the questionnaire instrument development procedures. The questions were tested by experts in the international marketing field. Thus, the language used was clear and concise, the ambiguity of the items was removed, the double-barreled questions were avoided, and the researcher ensured that the questions are understandable by the respondents. In addition, the respondents were highly experienced practitioners and had the ability to link key terms to relevant marketing concepts, which might reduce the presence of common method bias (MacKenzie & Podsakoff 2012).

Besides, the existence of common method bias was measured by Harman's single factor test. The common method bias exists if only one factor explains the majority of the covariance among the measures during the exploratory factor analysis with unrotated factor solutions (Podsakoff & Organ 1986; Podsakoff, MacKenzie & Podsakoff 2012). In our study, the highest variance accounted for a single factor was 35.82% of the 74.5% explained variance. Thus, the common method bias is unlikely to be a risk in this research.

5.7 Confirmatory Factor Analysis

This study is using structural equation modeling (SEM) to test the developed hypotheses and answer the main research questions. SEM is a powerful statistical technique that models several relationships among independent and dependent variables simultaneously (Loon Hoe 2008). This method is more flexible than other multivariate techniques, and consists of two-step approach: (1) the measurement model or confirmatory factor analysis (CFA), and (2) the structural model, which will be discussed later in this study, and after establishing the measurement model (Hair et al. 2014; Anderson & Gerbing 1988).

CFA highlights how the measured variables represent well the research constructs. This analysis model represents the first level of measurement and refers to the quality of measures before path analysis and hypotheses testing. CFA explains how valid the observed variables represent the targeted latent variable, and underlines the first step approach of structural equation modeling (Anderson & Gerbing 1988; Gallagher, Ting & Palmer 2008). The number of factors and the related set of variables are defined before the analysis, and based on theory. Thus, it confirms the EFA result, and the research theoretical model might be rejected or confirmed on the basis of how it fits the real data (Hair et al. 2014). Several factors might influence the output and the significance of the CFA findings.

5.7.1 Sample Size

The sample size is a critical point to consider before model specification since it affects the significance of SEM results. There is no consensus on the sample size required to run CFA or path analysis effectively. For instance, a larger sample of more than 200 is suggested by scholars to be appropriate for SEM. On the other hand, it has been proposed that a minimum of 100 sample size is acceptable, and SEM can run well on a smaller sample size (Gallagher, Ting & Palmer 2008). Hair et al. (2014) propose several factors that might impact the success of SEM. A sample size of 100 to 150 might be considered adequate if: (1) the number of latent variables is ≤ 5 ; (2) the minimum number of indicators per latent variable is 3; and (3) 0.6 or higher item communalities. For this research, the number of indicators is more than three for all the latent variables, and the item communalities are higher than 0.6 (see appendix 5.7) for the majority of the items. Besides, AMOS ran the model correctly (see figure 20). Thus, the 143 sample size of the study is considered to have sufficient data to run CFA analysis (Gallagher, Ting & Palmer 2008; Hair et al. 2014).

5.7.2 Model Identification

Once the measurement model is specified, the objective of a CFA is to have an over identified model. In other words, the unique covariance and variance terms should be greater than the number of estimated parameters. Thus, there is enough degree of freedom to estimate the parameters. The unique covariance variance is calculated as $1/2[p(p+1)]$, and p refers to the number of measured items (Hair et al 2014). The application of this formula for this study resulted in $1/2[62(62+1)] = 1,953$ unique covariances and variances. The number of parameters to be estimated is 55 (indicator of variable loadings) + 62 (Error terms for indicators) + 28 (one variance for each construct and 21 unique covariances among constructs) = 145. Thus, $1,953 - 145 = 1,808$, which suggests more degree of freedom than free parameters, and the model is over identified.

5.7.3 Factor Loadings and Goodness of Fit Indices

The other consideration of model measurement and construct validity is the significant standardised factor loadings, which should exceed 0.5, and values above 0.7 are ideal for high convergence (Gallagher, Ting & Palmer 2008). Finally, the goodness of fit indices refers to the model fit and assess how well the observed covariance matrix reflects the estimated one. These fit statistics indicate how satisfactory the data is fitting the measurement model (Hair et al. 2014). The values of fit indices are affected by sample size, model complexity, and error. The Chi-square test or CMIN is the main measure of model fit, which should produce a non-significant p-value for good model fit. However, this test is sensitive to sample size, and the researcher might reject a good model. Thus, other groups of fit indices were developed to provide a broader view of the goodness of fit (Gallagher, Ting & Palmer 2008). Table 5.9 summarises several groups of model fit indices and the adequate threshold values, as discussed in the literature (Hu & Bentler 1999; Schreiber et al. (2006); Loon Hoe 2008; Hair et al. 2014; Gallagher, Ting & Palmer 2008).

Table 5.9: Groups and values of model fit indices

Absolute fit indices	Goodness of fit values
Root mean square error of approximation (RMSEA)	$RMSEA < 0.08$
Standardised root mean residual (SRMR)	$SRMR < 0.08$
Normed chi-square (CMIN/DF)	$CMIN/DF < 5$
Incremental fit indices	
Comparative fit index (CFI)	$0.90 \leq CFI$
Tucker-Lewis Index (TLI)	$0.90 \leq TLI$
Relative Fit Index (RFI)	$0.90 \leq RFI$

Parsimony fit indices	
Parsimony adjusted goodness-of fit index (PGFI)	PGFI < 0.5
Parsimony normed fit index (PNFI)	PNFI < 0.5

The researcher is not supposed to report all the fit indices, and Hair et al. (2014) propose 3 or 4 goodness of fit indices, including one absolute, incremental, and parsimony fit indices. Parsimony indices are not reported in this study since it compares goodness of fit between two models, which is not an objective for this research. On the other hand, Schreiber et al. (2006) highlight that relative/normed chi-square (χ^2/df), Standardised root mean residual (SRMR), Comparative Fit Index (CFI), Non-normed Fit Index (TLI), and the Root Mean Square of Approximation (RMSEA) are essential indices to indicate model fit. Accordingly, this study reports the above indices, which consider the sample size and the complexity of the model.

5.7.4 Research Confirmatory Factor Analysis

The initial CFA of this study suggests the deletion of seven items that have loading factors below the threshold of 0.7. In addition, the model fit indices were 1.639 for CMIN/DF, .089 for SRMR, .792 for TLI, .802 for CFI, and .088 for RMSEA. The improvement process of construct validity and goodness of fit was performed by deleting the items FCI1, FCI3, FCI9, SMT5, SMT12, SMC1, and SMC6, which had lower factor loadings. Moreover, the suggested error covariances of observable variables within the same construct were applied to improve the overall model fit. These modification indices are considered only for observable variables errors of the same construct and supported by the literature. Thus, the changes have strong theoretical reason, and the respecification does not contradict the objective of the research (Hair et al 2014; Gallagher, Ting & Palmer 2008).

Figure 20 shows the covariance variance matrix of the seven latent variables and the regression lines to their corresponding observable variables. The CFA procedure was estimated successfully by AMOS, and the visual diagram highlights the values of the standardised factors loading. These estimates were higher than 0.7 with statistical significance, and without any loadings above 1 or below -1, except items ET1 and ET4; however, they were retained in the model for not violating the three indicators rule. The diagnostic test of standardised residual did not indicate any issues with study measures, and all the values were below the 4.0 benchmark (Hair et al. 2014).

Table 5.10 highlights the model goodness of fit indices and indicates that these values are acceptable but not excellent. This result is expected since these fit indices are highly impacted by the ratio of sample size and the number of parameters estimated. For example, Jackson (2003) explained that, on average, the Chi-square and RMSEA values are smaller when the ratio of sample size to number of parameters is high. Whereas, the CFI and the TLI values are larger when this same ratio is high. Besides, Kim (2005) suggests that the fit indices are influenced differently by the sample size. For example, CFI was found less sensitive and preferable when the sample size is small. On the other hand, TLI and SRMR values are highly sensitive to sample size, which might explain the lower value of TLI and the higher value of SRMR for the measurement model. For this study, the goodness of fit indices that are less impacted by sample size and the number of parameters estimated showed acceptable values. The CMIN/DF value is 1.639 and below the acceptable value of 5. The CFI is equal to the less conservative threshold of 0.9, and RMSEA is below the acceptable level of 0.07 (Hooper, Coughlan & Mullen 2008; Steiger 2007). Thus, the thesis can proceed to validity analysis since the fit indices that are independent of the influence of sample size are acceptable, and for a complex model, the more demanding cutoff values are unobtainable in practice (Marsh, Hau & Wen 2004).

Table 5.10: Measurement model summary of goodness of fit tests

CMIN	CMIN/DF	SRMR	TLI	CFI	RMSEA
2003.925 p-value .000	1.639	.087	.891	.900	.067

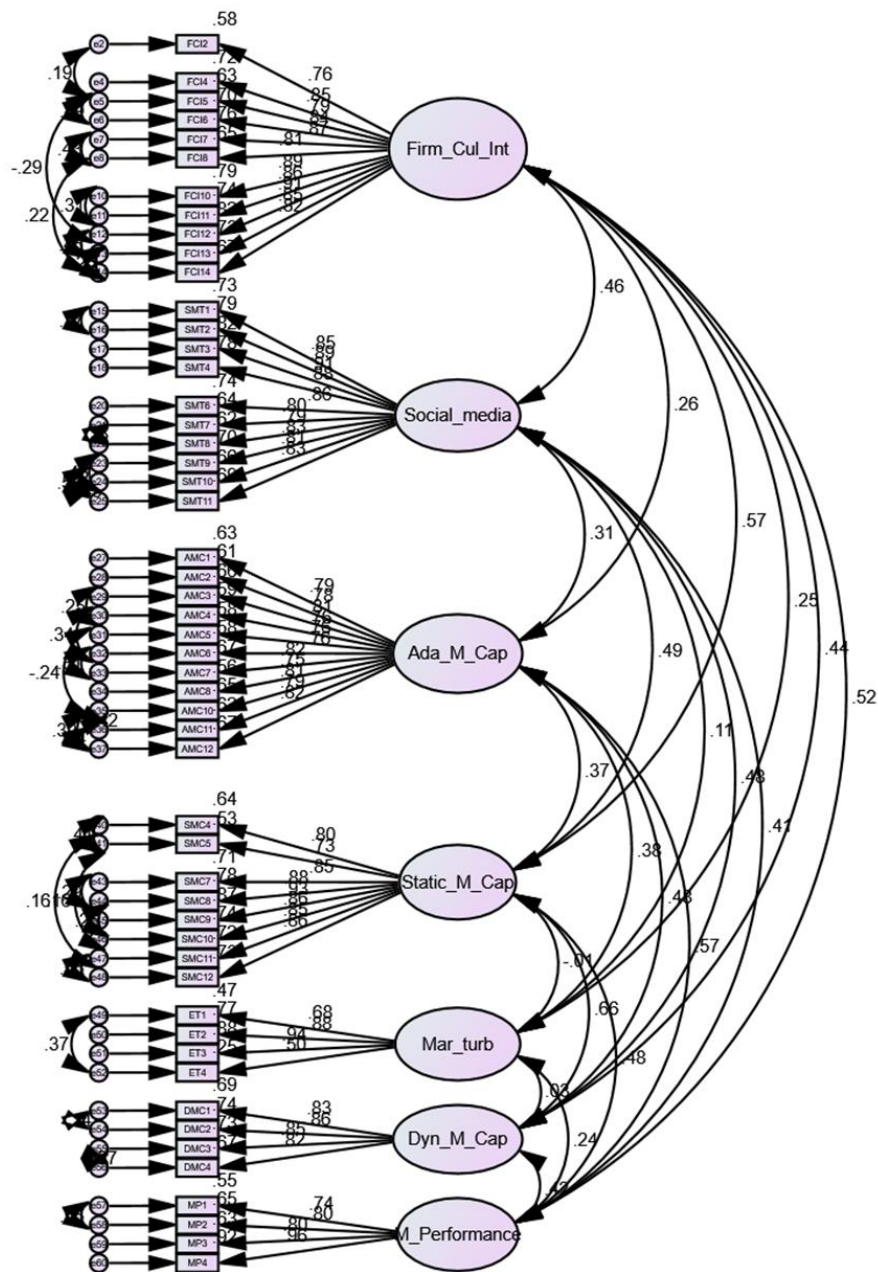


Figure 20: Research measurement model visual diagram

5.8 Construct validity

Construct validity is a major assessment of research measures. This scientific procedure indicates the effective level of construct operationalisation, and how accurately the measures reflect what are supposed to measure (Churchill 1979; Gallagher, Ting & Palmer 2008). Hair et al. (2014) suggest four components to assess construct validity. First, face validity is a subjective understanding of the item's content, and how it reflects the constructs in question. This type of validity was conducted during the instrument development procedures. Second, convergent validity refers to the common shared variance between the indicators of the same construct. Third, discriminant validity evaluates the construct's divergence, and how it differs from others and not measuring the same thing. Fourth, nomological validity consists of statistically significant inter-construct correlations (Gallagher, Ting & Palmer 2008; Hair et al. 2014).

5.8.1 Convergent validity

The values of the average variance extracted (AVE) greater than 0.5 and construct reliability (CR) above 0.7 indicate convergent validity. AVE is calculated using the formula: $AVE = \sum_{i=1}^n L_i^2 / n$. L_i represents the standardised factor loading of i item, and n is the number of total items (Hair et al. 2014).

The firm cultural intelligence $AVE = .763^2 + .846^2 + .794^2 + .835^2 + .870^2 + .808^2 + .887^2 + .861^2 + .906^2 + .852^2 + .816^2 / 11 = .707$

The social media technologies $AVE = .853^2 + .888^2 + .905^2 + .882^2 + .863^2 + .797^2 + .786^2 + .835^2 + .813^2 + .829^2 / 10 = .716$

The adaptive marketing capabilities AVE = $.793^2 + .781^2 + .811^2 + .765^2 + .764^2 + .761^2 + .821^2 + .748^2 + .807^2 + .787^2 + .817^2 / 11 = .620$

The static marketing capabilities AVE = $.799^2 + .730^2 + .845^2 + .884^2 + .931^2 + .860^2 + .846^2 + .855^2 / 8 = .715$

The environmental turbulence AVE = $.684^2 + .877^2 + .939^2 + .498^2 / 4 = .592$

The dynamic marketing capabilities AVE = $.828^2 + .863^2 + .854^2 + .816^2 / 4 = .706$

The firm performance AVE = $.742^2 + .804^2 + .795^2 + .960^2 / 4 = .688$

5.8.2 Construct reliability

CR is calculated using the formula $CR = (\sum_{i=1}^n L_i)^2 / (\sum_{i=1}^n L_i)^2 + (\sum_{i=1}^n e_i)$. L_i represents the standardised factor loading of i item and e_i is the error variance term of i (Hair et al. 2014).

The firm cultural intelligence CR = $(.763 + .846 + .794 + .835 + .870 + .808 + .887 + .861 + .906 + .852 + .816)^2 / (.763 + .846 + .794 + .835 + .870 + .808 + .887 + .861 + .906 + .852 + .816)^2 + (.418 + .284 + .37 + .303 + .244 + .348 + .214 + .258 + .179 + .274 + .334) = .964$

The social media technologies CR = $(.853 + .888 + .905 + .882 + .863 + .797 + .786 + .835 + .813 + .829)^2 / (.853 + .888 + .905 + .882 + .863 + .797 + .786 + .835 + .813 + .829)^2 + (.272 + .211 + .18 + .222 + .256 + .365 + .382 + .303 + .339 + .313) = .962$

The adaptive marketing capabilities CR = $(.793 + .781 + .811 + .765 + .764 + .761 + .821 + .748 + .807 + .787 + .817)^2 / (.793 + .781 + .811 + .765 + .764 + .761 + .821 + .748 + .807 + .787 + .817)^2 + (.372 + .39 + .342 + .415 + .416 + .421 + .326 + .44 + .349 + .38 + .332) = .947$

The static marketing capabilities CR = $(.799 + .730 + .845 + .884 + .931 + .860 + .846 + .855)^2 / (.799 + .730 + .845 + .884 + .931 + .860 + .846 + .855)^2 + (.366 + .467 + .285 + .219 + .133 + .261 + .284 + .268) = .952$

The environmental turbulence CR = $(.684 + .877 + .939 + .498)^2 / (.684 + .877 + .939 + .498)^2 + (.532 + .231 + .118 + .752) = .846$

The dynamic marketing capabilities CR = $(.828 + .863 + .854 + .816)^2 / (.828 + .863 + .854 + .816)^2 + (.314 + .256 + .271 + .335) = .906$

The firm performance CR = $(.742 + .804 + .795 + .960)^2 / (.742 + .804 + .795 + .960)^2 + (.45 + .354 + .367 + .078) = .897$

All the study constructs achieved AVE > .5 and CR > .7 (see table 5.11). Thus, the research constructs indicate convergent validity (Hair et al. 2014).

5.8.3 Discriminant validity

Discriminant validity is achieved if the AVE of any two constructs is higher than their squared correlation estimate (Hair et al. 2014). Table 5.11 shows that the AVE of the seven study constructs in the diagonal is greater than their squared correlations below the diagonal line. Thus, the research constructs achieve discriminant validity. Besides, the values of the majority of inter-construct correlations are statistically significant. Only the correlations between ET and SMC and ET and DMC were not significant. However, other correlations are consistent. These two exceptions are not a major concern, and nomological validity is supported for this research (Hair et al. 2014).

Table 5.11: Construct reliability, convergent, and discriminant validity

	CR	FCI	SMT	SMC	DMC	AMC	MP	ET
FCI	.964	.707						
SMT	.962	.213**	.716					
SMC	.952	.326**	.238**	.715				
DMC	.906	.190**	.226**	.440**	.706			
AMC	.947	.069**	.095**	.137**	.233**	.620		
MP	.897	.272**	.169**	.228**	.176**	.323**	.688	
ET	.846	.060**	.011*	.000	.000	.147**	.056**	.592

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

5.9 Structural Model and Hypotheses Testing

The CFA established the validity of the measures and the overall model fit. This measurement model indicates how well the observable variables of a construct relate to one another and reflect the latent variable in question. This covariance-based approach is the first step in the structural equation modeling technique. The study CFA procedure provides valid and reliable seven latent variables, and an overall acceptable model fit. Thus, the research proceeds to SEM second step approach, which is the structural model and hypotheses testing using the AMOS software. The same factors that influenced CFA, such as sample size and model identification, might impact the structural model. The research model does not contain a pair of constructs that have relationships both ways between them. Thus, for the recursive model, and if CFA is identified, the structural model is also probably identified (Hair et al. 2014).

Figure 21 highlights the structural relationship between the study variables and reflect the research developed hypotheses in chapter three. The visual diagram highlights the relationships between the study

exogenous and endogenous variables. The model is established using the observable variables directly by averaging the items that constitute the construct. This path analysis model is an alternative to the latent variable model when the CFA produced high construct reliability (Stephenson & Holbert 2003). Besides, previous scholars suggest that the experience and size of the firm affect its performance and capabilities (Teece et al. 1997; Guo et al. 2018; Morgan & Slotegraaf 2012). Thus, these two variables were included as control variables for the research model. The covariance between the errors of the different marketing capabilities constructs has a theoretical reason. Previous literature underlines correlations between these capabilities (Guo et al. 2018; Kachouie, Mavondo & Sands 2018).

The model explains 35% of the variance in firm performance, and Table 5.12 shows the goodness of fit indices that suggest the acceptance of the research proposed structural model. Hence, the study proceeds to path analysis and hypotheses testing.

Table 5.12: Structural model summary of goodness of fit tests

CMIN	CMIN/DF	SRMR	TLI	CFI	RMSEA
16.704 p=.033	2.088	.0428	.886	.967	.088

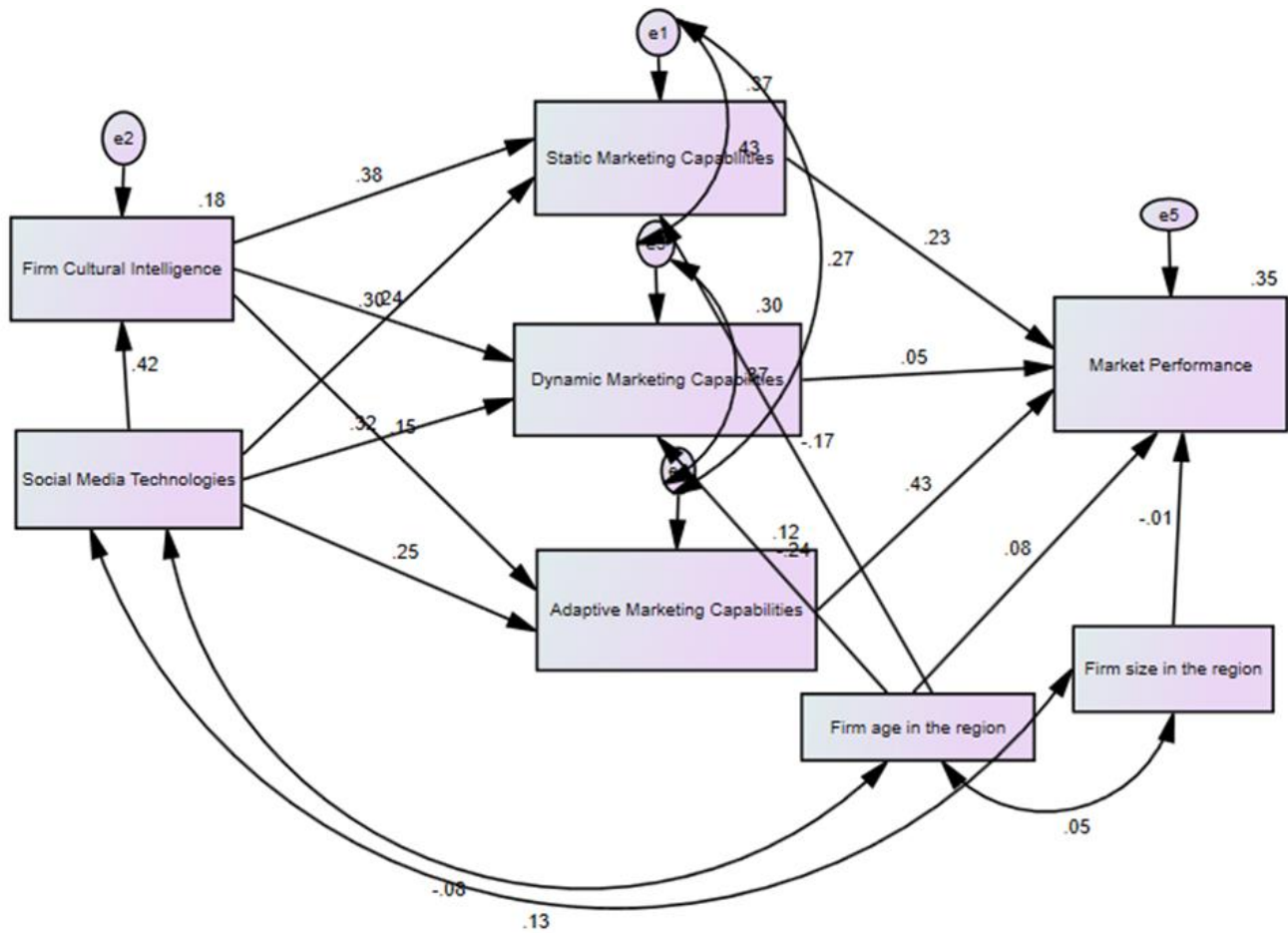


Figure 21: Research structural model visual diagram

5.9.1 The Relationships between FCI, SMC, DMC, and AMC

The findings of path analysis indicate that firm cultural intelligence relates positively and significantly to static marketing capabilities ($\beta = 0.38$, $t\text{-value} = 5.112$, $p < .001$) and dynamic marketing capabilities ($\beta = 0.24$, $t\text{-value} = 3.026$, $p = .002$). However, this relationship was not significant with adaptive marketing capabilities ($\beta = 0.15$, $t\text{-value} = 1.764$, $p = .078$). Thus, hypothesis 1: *Firm cultural intelligence is positively related to static marketing capabilities*, and hypothesis 2: *Firm cultural intelligence is positively related to dynamic marketing capabilities* were supported. However, hypothesis 3: *Firm cultural intelligence is positively related to adaptive marketing capabilities* was rejected.

5.9.2 The relationships between SMT, SMC, DMC, AMC, and FCI

The analysis of path estimates highlights that social media technologies relate positively and significantly to static marketing capabilities ($\beta = 0.30$, $t\text{-value} = 4.001$, $p < .001$), dynamic marketing capabilities ($\beta = 0.32$, $t\text{-value} = 4.069$, $p < .001$), adaptive marketing capabilities ($\beta = 0.25$, $t\text{-value} = 2.818$, $p = .005$), and firm cultural intelligence ($\beta = 0.42$, $t\text{-value} = 5.588$, $p < .001$). Thus, hypothesis 4: *Firm social media technologies are positively related to static marketing capabilities*, hypothesis 5: *Firm social media technologies are positively related to dynamic marketing capabilities*, hypothesis 6: *Firm social media technologies are positively related to adaptive marketing capabilities*, and hypothesis 7: *Firm social media technologies are positively related to firm cultural intelligence* were supported.

5.9.3 The relationships between SMC, DMC, AMC, and MP

The relationships between static marketing capabilities ($\beta = 0.23$, $t\text{-value} = 2.672$, $p = .008$), adaptive marketing capabilities ($\beta = 0.43$, $t\text{-value} = 5.506$, $p < .001$), and firm performance were positive and significant. However, the relationship between dynamic marketing capabilities and firm performance was not significant ($\beta = 0.05$, $t\text{-value} = 0.555$, $p = .579$). Thus, hypothesis 8: *Static marketing capabilities are positively related to firm performance* was supported. Hypothesis 9: *Dynamic marketing capabilities are positively related to firm performance* was not supported. Besides, hypothesis 10: *Adaptive marketing capabilities are positively related to firm performance* was supported.

5.9.4 The relationships between SMC, DMC, AMC, and MP under low and high turbulence

This research attempts to explain the low and high levels of environmental turbulence moderation effects on the relationships between marketing capabilities and performance. To test these hypotheses, the variable environmental turbulence was recoded using SPSS to a new categorical variable. The values below the median of ET distribution were recoded to 1, and represent the low turbulence group 1. The

values above 5 were recoded to 2, and represent the high turbulence group 2. This procedure is followed by a multi-group path analysis using AMOS. This approach is suitable for testing the study hypotheses by comparing specific path parameters across the two groups of high and low environmental turbulence (Stephenson, Holbert & Zimmerman 2006).

Figure 22 and 23 shows the research structural model and path estimates under low and high environmental turbulence consecutively. Table 5.13 proposes that the moderated model has satisfactory goodness of fit indices.

Table 5.13: Multi-group moderation model summary of goodness of fit tests

CMIN	CMIN/DF	SRMR	TLI	CFI	RMSEA
27.467 p=.037	1.717	.0492	.846	.956	.071

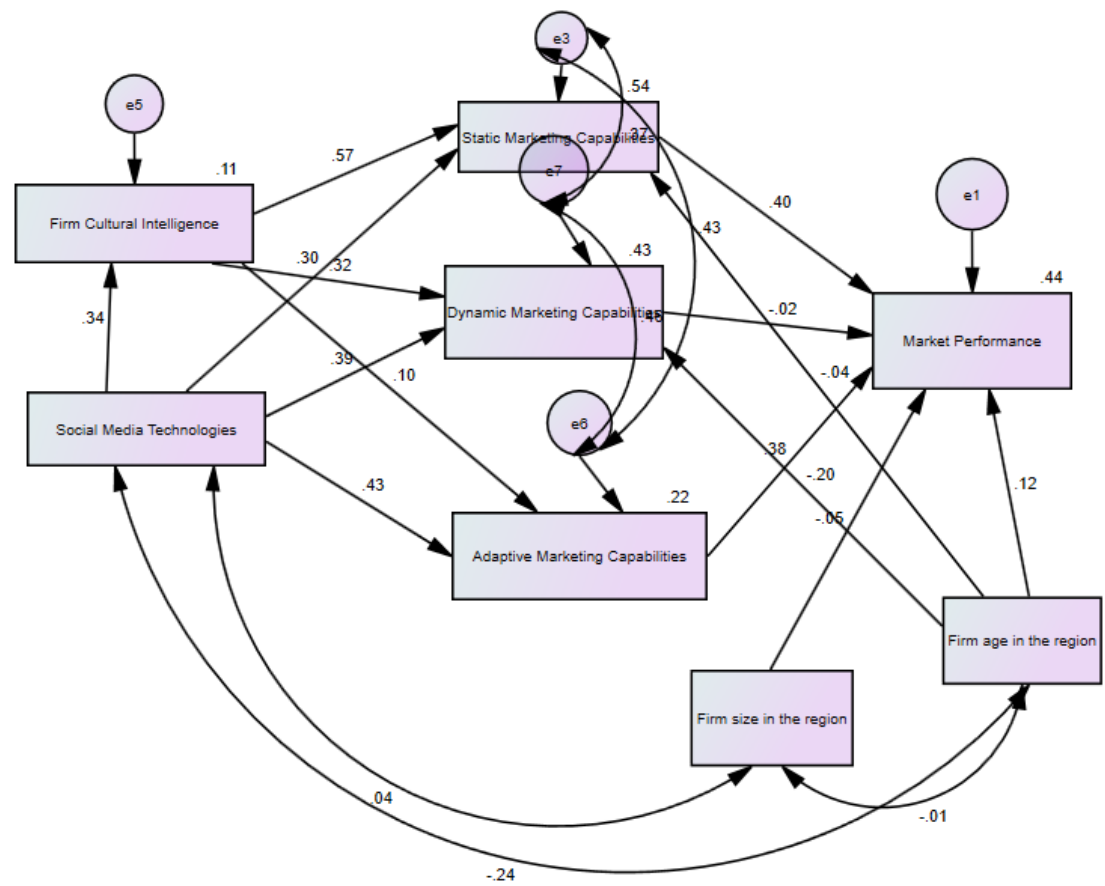


Figure 22: Low turbulence moderated model visual diagram

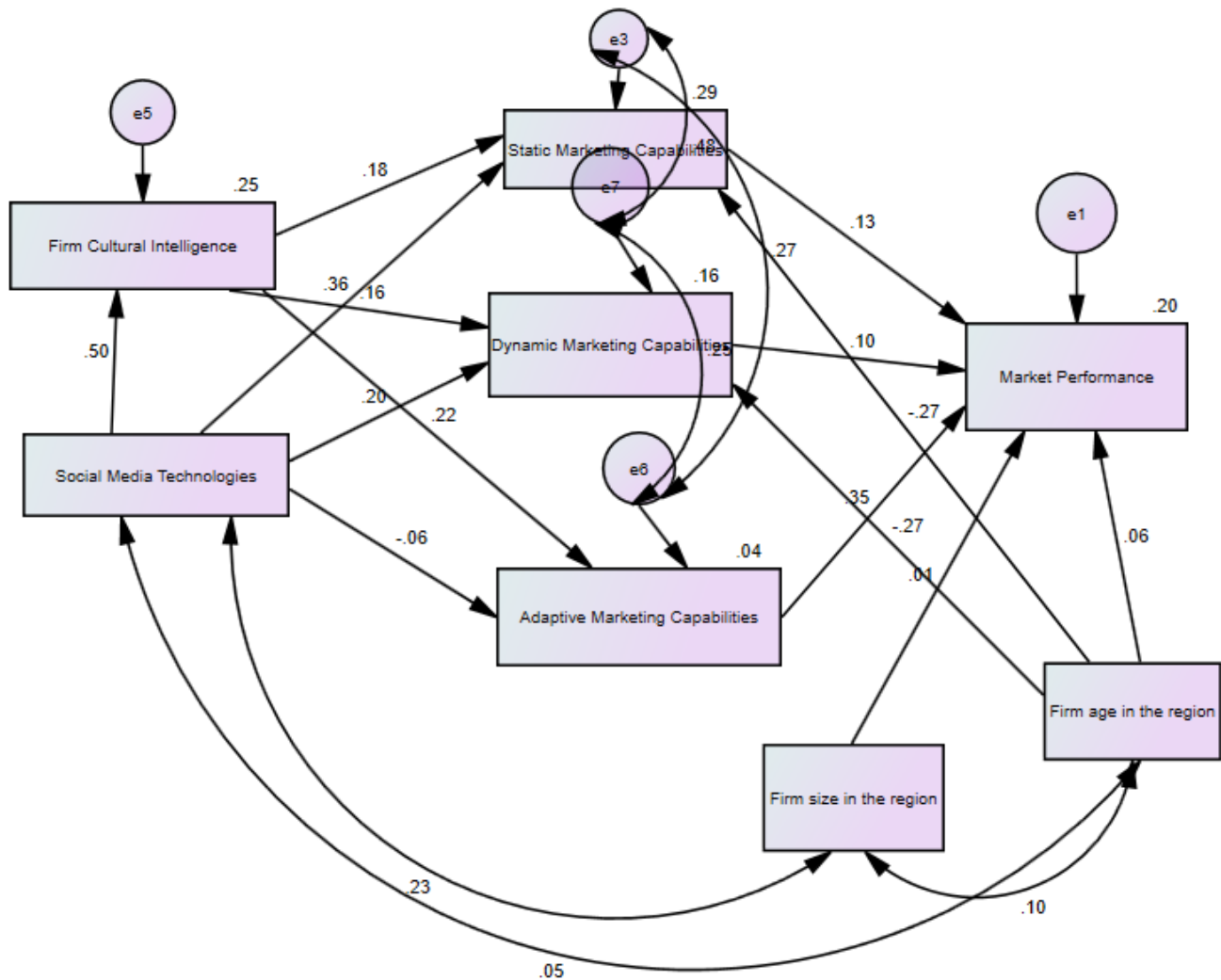


Figure 23: High turbulence moderated model visual diagram

The multi-group path analysis indicates that static marketing capabilities relate positively and significantly to performance under low ET ($\beta = 0.40$, $t\text{-value} = 3.046$, $p < .01$). However, this relationship is not significant under high ET ($\beta = 0.13$, $t\text{-value} = 1.096$, $p = .279$). Thus, hypothesis 8a: *The relationship between static marketing capabilities and firm performance is weaker when the level of environmental turbulence is high than when it is low* was supported.

On the other hand, the relations between dynamic marketing capabilities and firm performance were insignificant under both low ($\beta = -0.02$, $t\text{-value} = -0.128$, $p = .903$) and high ($\beta = 0.10$, $t\text{-value} = 0.823$, $p =$

.416) environmental turbulence. Therefore, hypothesis 9a: *The relationship between dynamic marketing capabilities and firm performance is not moderated by the level of environmental turbulence* was supported.

Finally, the associations between adaptive marketing capabilities and firm performance were positive and significant under both low ($\beta = 0.38$, $t\text{-value} = 3.023$, $p < .01$) and high ($\beta = 0.35$, $t\text{-value} = 3.335$, $p < .001$) environmental turbulence. Thus, hypothesis 10a: *The relationship between adaptive marketing capabilities and firm performance is stronger when the level of environmental turbulence is high than when it is low* was not supported. The findings of the models' path analysis and hypotheses tests are summarised in table 5.14.

Table 5.14: Summary of the research hypothesis test results

Hypothesis	Standardised estimate	Standard Error	Critical Ratio	Results
H1 FCI to SMC	0.377	0.064	5.112***	Supported
H2 FCI to DMC	0.235	0.071	3.026**	Supported
H3 FCI to AMC	0.154	0.069	1.764	Not Supported
H4 SMT to SMC	0.296	0.068	4.001***	Supported
H5 SMT to DMC	0.317	0.074	4.069***	Supported
H6 SMT to AMC	0.246	0.073	2.818**	Supported
H7 SMT to FCI	0.425	0.080	5.588***	Supported
H8 SMC to MP	0.231	0.087	2.672**	Supported
H9 DMC to MP	0.051	0.088	0.555	Not supported
H10 AMC to MP	0.430	0.086	5.506***	Supported
H8a SMC to MP (Low)	0.399	0.132	3.046**	Supported
H8a SMC to MP (High)	0.134	0.115	1.096	
H9a DMC to MP (low)	-0.02	0.127	-0.128	Supported
H9a DMC to MP (High)	0.100	0.124	0.823	
H10a AMC to MP (low)	0.381	0.139	3.023**	Not Supported
H10a AMC to MP (High)	0.345	0.122	3.335***	

***. Correlation is significant at the 0.001 level

**. Correlation is significant at the 0.01 level

*. Correlation is significant at the 0.05 level

5.10 Mediation Tests

Further to the hypotheses test, this study attempts to explain the relationships between the two independent variables: (1) firm cultural intelligence, (2) social media technologies, and firm performance as a dependent variable through the mediation effects of marketing capabilities. Besides, one of the objectives of this research is to understand the mediation effect of firm cultural intelligence on the relationship between social media technologies and marketing capabilities. Mediation tests provide an understanding of how and why the variables are associated in a specific manner. Baron and Kenny (1986; p. 1176) propose three conditions for a variable to function as a mediator: (1) the changes in the independent variable account for the changes in the mediator variable, (2) the changes in the mediator variable account for the change in the dependent variable, and (3) the significant effect of the independent variable on the dependent variable becomes either lower or insignificant when the mediator is introduced to the regression analysis. There are several statistical tests for mediation effect, such as partial correlation or hierarchical regression model. These tests have several limitations, such as the pre-assumption of mediator normality distribution, and the difficulty associated with its application to complex models with multiple mediators. These challenges are resolved with the SEM bootstrap method, which is considered for testing the mediation effects for this research (Cheung & Lau 2007). The mediation model (figure 24) is specified in AMOS by adding two regression relationships from the independent variables FCI and SMT to the dependent variable MP. The bootstrap method was performed using 2000 as the number of bootstrap samples and bias-corrected confidence intervals of 95%. Table 5.15 shows that this mediated model has satisfactory goodness of fit indices, and the study can proceed to analyse the direct and indirect standardised path estimates and the significance levels.

Table 5.15: FCI and SMT mediation model summary of goodness of fit tests

CMIN	CMIN/DF	SRMR	TLI	CFI	RMSEA
9.137 p=.243	1.305	.0400	.968	.992	.046

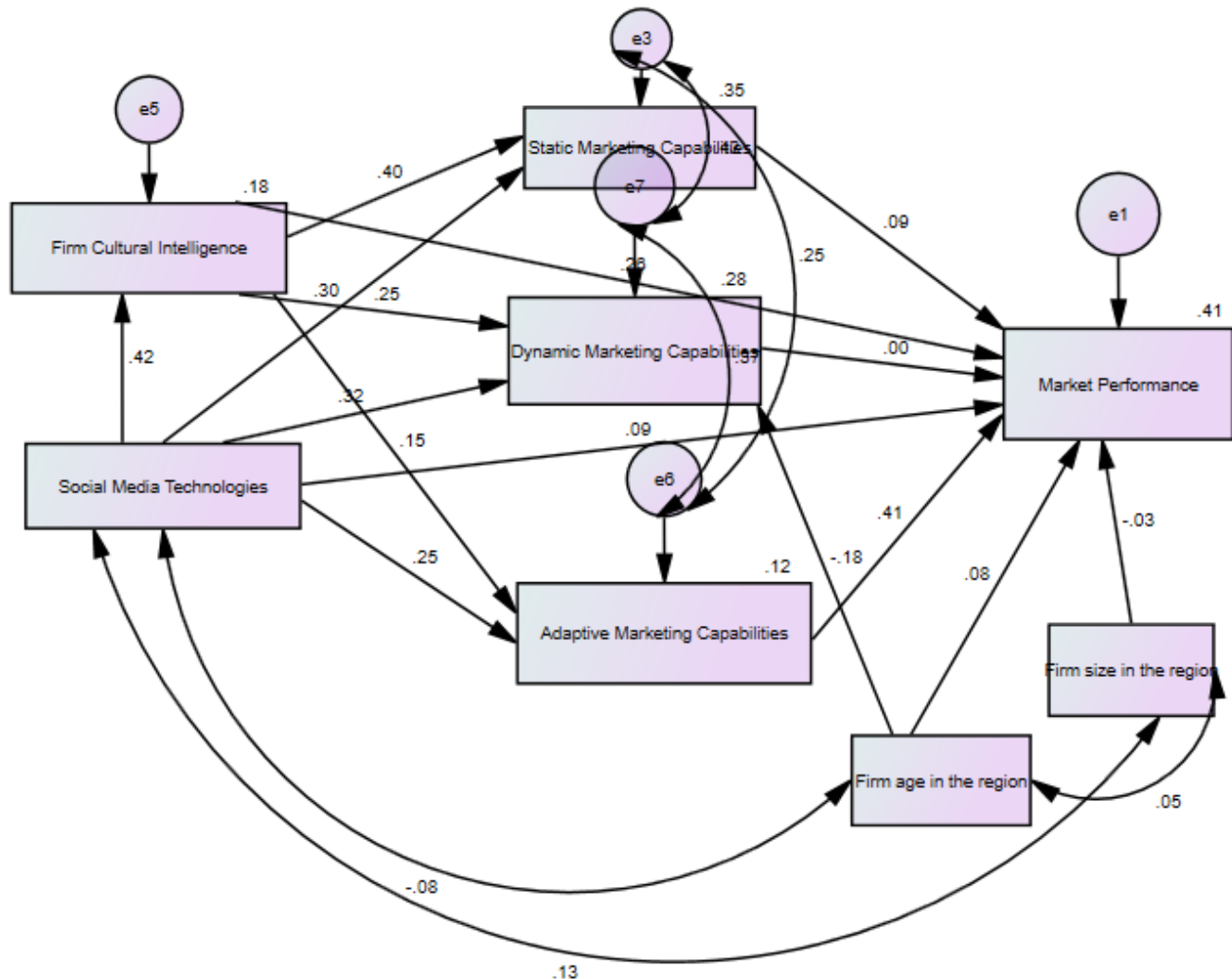


Figure 24: FCI and SMT structural mediation model visual diagram

The results of the mediation tests (Table 5.16) indicate that FCI standardised direct effect on firm performance was positive and significant; however, the standardised indirect effect was insignificant. Thus, there is no mediation between FCI and MP. The SMT standardised direct effect on firm performance was not significant, while the standardised indirect effect was significant. Thus, marketing capabilities fully mediate this relationship.

The SMT standardised direct and indirect effect on SMC and DMC were significant; however, the path estimated values were lower for the indirect relationships. Thus, FCI partially mediates these relationships. The SMT standardised direct effect on AMC was significant, while the standardised indirect effect was not significant. Thus, FCI did not mediate the relationship between SMT and AMC. Table 5.16 presents a summary of the mediation tests.

Table 5.16: Summary of the FCI and SMT mediation tests

Relationships	Mediators	Standardized direct effects	Standardized indirect effects	Results
FCI to MP	SMT, DMC, AMC	0.26 (.001)	0.09 (.074)ns	No mediation
SMT to MP	SMT, DMC, AMC	0.09 (.245)ns	0.28 (.001)	Full mediation
SMT to SMC	FCI	0.30 (.003)	0.17 (.001)	Partial mediation
SMT to DMC	FCI	0.32 (.001)	0.10 (.001)	Partial mediation
SMT to AMC	FCI	0.25 (.022)	0.06 (0.090)ns	No mediation

5.11 Post Hoc Tests

The relationship between dynamic marketing capabilities and firm performance was not significant, and as a result, the study hypothesis 9 was not supported. Kachouie, Mavondo and Sands (2018) argue that the DMC impact on performance is achieved through the configuration of other firm operational capabilities. Thus, the mediation bootstrap test was performed to understand the relationship between DMC and firm performance better. The mediation model (Figure 25) was specified in AMOS by adding a regression path between DMC and SMC. Table 5.17 indicates that this DMC mediated model has satisfactory goodness of fit indices.

Table 5.17 DMC mediation model summary of goodness of fit tests

CMIN	CMIN/DF	SRMR	TLI	CFI	RMSEA
16.704 p=.033	2.088	.0428	.886	.967	.088

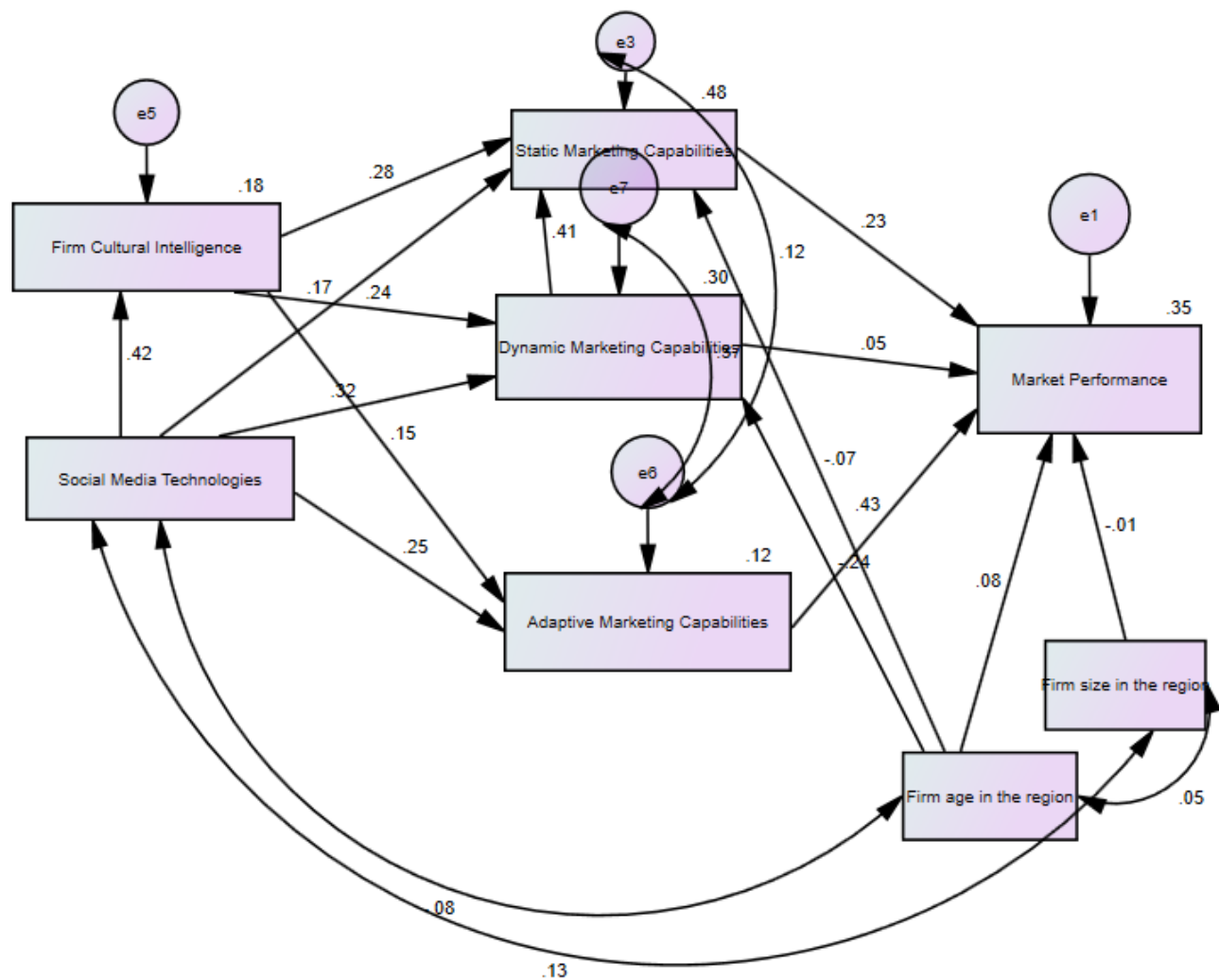


Figure 25: DMC structural mediation model visual diagram

The result of the mediation test (Table 5.18) suggests that the standardised direct effect of DMC on MP was not significant. However, the standardised indirect effect was significant. Thus, SMC fully mediate this relationship.

Table 5.18: Summary of the DMC mediation test

Relationship	Mediator	Standardized direct effect	Standardized indirect effect	Result
DMC to performance	SMC	0.05 (.514)ns	0.09 (.014)	Full mediation

5.12 Summary

The study result chapter presents the analysis methods and the findings of hypotheses testing. The data collected from 143 MNE's regional offices were preliminary checked in SPSS for missing data values, outliers, Multicollinearity, normality of the distributions, and linearity assumptions. Further, this chapter highlights the findings of EFA, which underline the presence of seven latent variables. These factors explained 74.5% of the total variance in the proposed model and the first factor was below the 50% criterion for the risk of common method bias. The Cronbach's alpha of all study constructs scale was above the 0.7 threshold.

The chapter also presents the measurement model. A confirmatory factor analysis was conducted with AMOS, and the findings showed that the covariance-variance model achieved acceptable goodness of fit indices. The tests of construct validity indicate that the measurements of this research are valid and reliable. The constructs' AVE and CR were above the 0.5 and 0.7 criteria, which confirmed the convergent validity. Besides, the AVEs of each construct were higher than their inter-construct correlations with other study constructs, which confirmed the discriminant validity of the study measures.

This chapter concludes with the structural model path analysis and hypotheses testing. All the structural models achieved satisfactory goodness of fit indices. The results indicate that firm cultural intelligence and social media technologies relate significantly to static, dynamic, and adaptive marketing capabilities. The static and adaptive marketing capabilities relate positively and significantly to firm performance. However, this relationship was not significant for dynamic marketing capabilities.

The multi-group moderation models showed that static marketing capabilities relate to performance only under low environmental turbulence. However, the relationship between adaptive marketing capabilities

and performance is positive and significant under all levels of turbulence. Furthermore, several levels of environmental turbulence did not moderate the relationship between dynamic marketing capabilities and firm performance.

Finally, the mediation tests explained that the relationship between social media technologies and marketing capabilities is partially mediated by firm cultural intelligence. The different types of marketing capabilities fully mediate the relationship between social media technologies and performance. In addition, the relationship between dynamic marketing capabilities and performance was fully mediated by static marketing capabilities.

CHAPTER SIX

DISCUSSION OF RESEARCH FINDINGS

6.1 Introduction

This chapter presents the discussion of the research findings and compares the results with previous literature. The objective of this chapter is to answer the main study questions through the interpretation of results and hypotheses testing. This study aims to understand the nature of international marketing capabilities in the social media and cross-cultural interactions environment. Thus, this chapter discusses the impact of firm cultural intelligence and social media technologies on the development of international marketing capabilities. Besides, it explains the role of these capabilities as mediators between the two resources: (1) firm cultural intelligence, (2) social media technologies, and firm performance. This chapter investigates as well as the influence of different types of marketing capabilities on firm performance under low and high levels of market turbulence, and the mediation effect of static marketing capabilities on the relationship between dynamic marketing capabilities and firm performance. Finally, the chapter concludes by investigating the influence of firm cultural intelligence on the relationship between social media technologies and international marketing capabilities.

6.2 The Relationships between FCI and International Marketing Capabilities

6.2.1 The Relationship between FCI and SMC

The findings of this research highlight a positive relationship between FCI and SMC. This result proposes that MNEs' processes and routines that consider the culture of foreign stakeholders manage

the marketing mix capabilities in foreign markets effectively. Cultural distance impacted MNEs' channel management and marketing strategies in international markets. The high level of firms' cultural sensitivity enhances the relationship value with stakeholders and reduce the negative effect of psychic distance (Skarmeas, Zeriti & Baltas 2016). This research found that culturally intelligent firms understand the business conditions of their stakeholders, and the decisions of standardised or adapted marketing mix strategies reflect the foreign market characteristics (Kraus et al. 2016). Thus, firm cultural intelligence reduces the risk of product failures in international markets. Besides, Griffith and Dimitrova (2014) argued that factors such as economic environment, legal and political systems, and cultural differences influence the firm strategy in foreign markets. This research implies that culturally intelligent firms have processes that evaluate the competitive risk of regional markets, and systems to design appropriate governance mechanisms with stakeholders. Thus, these procedures support an efficient structuring of relationships and collaboration with partners for complementary capabilities (Griffith & Dimitrova 2014).

Magnusson et al. (2013) studied marketing human capital skills for international business and demonstrated that managers' cultural intelligence moderates the relationship between environmental differences and marketing mix adaptations. This research extends this finding to the firm level and suggests that culturally intelligent firms develop marketing mix capabilities through a better understanding of foreign stakeholders' expectations, and an adequate assessment of environmental differences. According to Song et al. (2017), the national cultures in international markets influence MNEs' strategic choices such as pricing, product characteristics, advertising, and distribution channels. This impact of the firm marketing mix is shaped by consumers' national culture differences and the reactions to the firm product offerings. Thus, MNEs' have to develop static marketing capabilities that consider the product's cultural content, the launch time, and the advertising intensity that improves the

chance of acceptance by foreign consumers. The findings of our study are consistent with this argument. The culturally intelligent MNEs support a better understanding of culturally diverse consumers and design processes to evaluate the proposed financial plan and pricing in international markets. This firm cultural resource suggests marketing mix capabilities that improve the responses of consumers in cross-cultural interactions.

Bortoluzzi et al. (2014) highlight the importance of preconditions for successful strategy implementation in foreign markets. The MNEs' resources, such as distributors network, and the ability to manage several marketing mix programmes underscore the MNEs' strategic success in international markets. The findings of this research showed that firm cultural intelligence improves the static marketing capabilities through the efficient selection of culturally compatible distributors, and the development of governance mechanisms to ensure successful strategy implementation in these markets. Also, these practices are essential for effective global brand building strategies. These processes include the adaptation of a brand plan within a controlled framework, assignment of responsibilities, and the development of information sharing strategies (Matanda & Ewing 2012).

Finally, the positive and robust association between firm cultural intelligence and static marketing capabilities suggests that the processes of the culturally intelligent MNEs' provide a better understanding of the optimal prices that foreign customers are willing to pay. This knowledge facilitates the development of successful offerings, and enhance the relationships with the firm's stakeholders such as distributors and suppliers. Further, this intangible resource enhances the image and the reputation of the firm by enhancing the communication capabilities with several stakeholders in the international markets.

6.2.2 The Relationship between FCI and DMC

The findings of this research propose that firm cultural intelligence relates positively and significantly to dynamic marketing capabilities. This result suggests that culturally intelligent firms are highly sensitive to the unexpressed customer need in a foreign market. The successful engagement with other cultures and the work with lead users suggested that culturally intelligent firms might predict the emerging need of stakeholders ahead of the competitors. The quality of MNEs' relationships with foreign stakeholders is impacted by national cultures and improved as a result of shared expectations. These high-quality relationships facilitate the exchange of information and enhance firm effectiveness and efficiencies (Hoppner, Griffith & White 2015). Besides, these relational ties facilitate the acquisition of external knowledge to develop dynamic capabilities (Ganesan, Malter & Rindfleisch 2005). This result is consistent with the thesis finding, which implies that culturally intelligent firms understand the expectations of foreign stakeholders, build strong ties with them, and develop information strategies to discover their latent needs.

Parente, Baack and Hahn (2011) demonstrated that coordination with alliances or suppliers, and the organisation of complex products and processes are essential for the development of dynamic capabilities. Further, the cultural distance impacted this relationship negatively. These findings are consistent with the argument of the thesis. The culturally intelligent processes and coordination with stakeholders reduce the negative effect of cultural distance in a volatile market. Besides, the culturally intelligent firm knows how to resolve cultural differences with suppliers and partners. Thus, the culturally appropriate operating procedures and governance mechanisms enhance the development of dynamic marketing capabilities in international markets. Eisend, Evanschitzky and Calantone (2016) stated that marketing capabilities are shaped by the country institutional context. The socio-economic, regulative, and cultural systems influenced these dynamic capabilities. For example, these capabilities are affected negatively in countries with reliable legislative systems due to the availability of customers'

data. However, this impact turned out to be positive in cultures that emphasise self-expression values since these capabilities can address diverse customer needs and preferences. The adverse effects of these institutional factors are minimised in culturally intelligent firms, which understand the expectations of customers in international markets. Moreover, these firms have processes that evaluate the competitive risks of this new market and relate positively to the development of these marketing capabilities.

Olavarrieta and Friedmann (1999) stated that market orientation capability supports the creation and maintenance of customer value. This firm culture highlights a systematic collection and response to market information. Accordingly, this capability improves MNEs' anticipation of customers' unexpressed needs. This is in line with the results of this research in international markets. The positive relationship between firm cultural intelligence and market orientation as a dynamic marketing capability highlights the development of information sharing strategies with MNEs' stakeholders. Besides, culturally intelligent firms understand the expectation of foreign customers; thus, it is more apt to explore their latent needs.

The findings of this study propose that: (1) the development of information sharing strategies, (2) the ability to evaluate cultural compatibility, and (3) the resources that provide a better understanding of MNEs' stakeholders' expectations predict the successful development of dynamic marketing capabilities in international markets.

6.2.3 The Relationship between FCI and AMC

The association between firm cultural intelligence and adaptive marketing capabilities was not significant at $p\text{-value} < .05$; thus, the hypothesised relationship was not supported. However, the result pointed out a marginal significance since the $p\text{-value}$ was equal to .078. This finding suggests that firm cultural intelligence might influence the development of adaptive marketing capabilities with minimal

impact, and the presence of this resource only might not be adequate to develop such type of capabilities. The research results highlight the need to investigate other resources or capabilities that might explain or moderate the relation between firm culture intelligence and adaptive marketing capabilities.

Day (2011) proposes that deep customer insights are augmented and analysed with emerging new technologies. This reasoning implies the investment in resources that enable the vigilant capability of MNEs' from an information technology perspective. The intelligent systems that support fast learning might enhance the development of these capabilities in culturally intelligent firms. Besides, the new technologies support as well the target experiments, which is essential in complex and fragmented markets. Thus, the combination of these software tools and the advance in database management might impact the relationship between firm cultural intelligence and adaptive marketing capabilities positively. On the other hand, MNEs' open networks consist of building relationships with partners and access new resources and complementary skills. This type of capability might explain the marginal influence of firm cultural intelligence on adaptive marketing capabilities. The culturally intelligent firms develop information strategies with stakeholders in the foreign market and access new insights about emerging consumer behaviors. Thus, the interactions that underpin the open marketing capabilities and the resources of culturally intelligent firms explain the marginal impact on adaptive marketing capabilities.

Charoensukmongkol (2014) found that cultural intelligence is not related directly to adaptive capabilities in small to medium firms. This relationship was mediated by information acquisition capability and proposed that knowledge of international markets is a major driver of adaptive behaviors. This result is consistent with the thesis findings in MNE's firms and the theoretical conceptualisation of Day (2011). The firm intelligent culture resource relates to adaptive marketing capabilities if it is combined with

knowledge acquisition capabilities and technological systems that generate valuable insights into changing international markets.

Zeng et al. (2013) posit that MNEs' experiences in different cultures might not secure the success of subsidiaries in foreign new markets. These firms must establish new processes and mechanisms to update and correct previous knowledge before its application in new dissimilar markets. These insights provide another perspective to explain the marginal association of firm cultural intelligence and adaptive marketing capabilities in this thesis. The culturally intelligent firm might draw on previous experiences to develop processes and routines in new dissimilar markets. However, this resource might have a detrimental effect on the subsidiaries due to learning errors, lack of data analytics, and technological capabilities that support fast experimentation in the fast-changing markets environment (Day 2011).

The analysis of the relationship between firm cultural intelligence and adaptive marketing capabilities enriches the discussion on the development of newly conceptualised capabilities. The fast changes in consumer behaviors and the emergence of new media inform MNEs to create new knowledge and deploy new technologies to understand stakeholders in dissimilar cultures. The cultural intelligence resource might provide essential information to understand the expectation of foreign stakeholders; however, this market knowledge should be combined with newer technological systems and experiment abilities to confirm the development of these newer marketing capabilities.

Social media technologies provide an effective ability for information acquisition; thus, the research explores an indirect relationship between firm cultural intelligence and adaptive capabilities, and tests for the mediation effect of social media technologies. The model was specified by introducing a new path between firm cultural intelligence and social media technologies. The model presents adequate goodness of fit indices (CMIN 16.9 $p=.031$; CMIN/DF=2.112; SRMR=.0451; TLI=.884; CFI=.967;

RMSEA=.089). The analysis highlights a significant indirect effect ($\beta = 0.10$, $p = .011$) between firm cultural intelligence and adaptive marketing capabilities. Thus, this relationship is mediated by social media technologies. The result provides additional support for the development of adaptive marketing capabilities in the digital age from the lens of firm cultural intelligence and social media technologies. The presence of social media technologies is essential for culturally intelligent firms to understand the expectations of international stakeholders and develop efficient processes and routines that relate to the development of adaptive marketing capabilities. The strategic use of these online platforms facilitates the development of vigilant learning capabilities and experimentation capabilities in culturally intelligent firms. Additionally, these MNEs' social media networks contribute to the integration of stakeholders resources into their processes, which implies the development of open marketing capabilities.

The finding from the mediation test clarifies the impact of firm cultural intelligence on adaptive marketing capabilities. This result confirms empirically that the combination of firms' cultural resources with technological capabilities such as social media technologies contribute to the development of adaptive marketing capabilities. Accordingly, the empirical analysis is consistent with the original theoretical conceptualisation of Day (2011), and provide additional insights on how MNEs' firms develop newer capabilities in international markets.

6.3 The Relationships between SMT and International Marketing Capabilities

6.3.1 The Relationship between SMT and SMC

The findings of this research suggest that social media technologies relate positively and significantly to static marketing capabilities. This result supports the developed hypothesis and explains that MNEs are

using social media platforms to highlight their offerings and interact with their international stakeholders. The use of these technologies is becoming an integral part of marketing strategy execution. Firms are deploying these online resources to communicate prices, products' launch, promotions, and other marketing programmes with foreign stakeholders. Thus, the use of these platforms proposes the development of marketing mix capabilities. Pratono (2018) found that the trust-based customer network enhances the selling and pricing capabilities of the firm. MNEs' deploy trusted information from the customer network to apply flexible and reasonably perceived price structures. This finding is consistent with the thesis result, which explains that social media technologies enhance the development of marketing mix capabilities. The engaging and exciting content foster a higher level of communications with stakeholders. Moreover, these engaged stakeholders are acknowledged and rewarded, which enhances trust and improves the firm marketing mix capabilities.

Okazaki and Taylor (2013) explored the role of social media technologies in international advertising, and stated that the impact of networks, image transferability, personal extensibility are the primary facets of social media technologies in an international context. The result of this thesis confirmed this conceptualisation. These network technologies can support MNEs to establish relationships and reach a large number of stakeholders in different geographical areas and cultures. Besides, the brand image can be maintained through the firms' network, and similar segments across borders might be attracted. These online platforms reduced the time required to interact with international stakeholders. Furthermore, social media ties are essential resources that contribute to the strategic value of international branding, and the effective management of these stakeholder relationships predicts the success of international brand strategy (Gao et al. 2018).

Godey et al. (2016) found that interactive social media tools influenced brand awareness and image in global markets. The research explored the communication capability of these platforms, such as entertainment, interaction, customisation, trendiness, and WOM. This result confirms the finding of the thesis. The MNEs firms are using the interactive resources of social media to communicate effectively with international stakeholders. The firms' messages can be customised to provide values to several customers and partners. Besides, the MNEs firms can benefit from the robust network's connections that spread the WOM and amplify brand awareness and image. The social media tools differ from other communication mediums by the speed of message transfer, which supports the firm introduction of new products or price lists (Wang, Pauleen & Zhang 2016).

The discussion of the thesis findings and the comparison with previous research in the social media domain confirmed the positive influence of the online platforms on the development of static marketing capabilities. The strategic use of social media and the platforms' interactive tools highlight higher and effective communications with international stakeholders. The network structure and abilities foster valuable relationships and engagement with foreign customers and partners. Also, the reach of these online networks allows higher brand awareness, successful launch of the new product, and effective communication of pricing structures. Thus, these resources relate to the development of MNEs' marketing mix capabilities in international markets.

6.3.2 The Relationship between SMT and DMC

The thesis result pointed out a positive and significant relationship between social media technologies and dynamic marketing capabilities. This finding highlights that MNEs' social media platforms support firm engagement with stakeholders to discover their latent needs. Firms can deploy the platforms to listen to new ideas generated by their stakeholders. The MNEs' participation in online forums enhances

the firm knowledge of market trends and emerging customers' need ahead of the competition. Besides, the firms employ social media data analytics to learn more about their audiences and their unexpressed needs. Gensler et al. (2013) confirmed these findings and explained that consumer-generated brand stories on social media platforms are insightful compared to traditional media. These stories are visible and explain products or services experiences, evaluations, and the interactions between the network members. Accordingly, the social media analytics amplifies the MNEs' knowledge of their stakeholders' behaviors and informs the development of solutions to address their latent needs.

Trainor et al. (2013) found that the information generated from the interactions on firms' social media platforms are valuable. Besides, the integration of this information within the customer relationship management systems and the effective response to customers' need represent a firm competency that allows the growth of the firm in dynamic markets. This result reflects the thesis finding and explains that MNEs firms create engaging content to stimulate interactions, and these conversations generate the required information to understand customers' needs. Moreover, the knowledge acquired from these platforms and the accumulation of experiences suggests strategic capabilities for growth in dynamic markets (Nguyen et al. 2015). Accordingly, the stakeholders' engagement initiatives and generation of information support the development of dynamic marketing capabilities.

Sashi (2012) underlines the productive engagement activities on firms' social media platforms. The engagement programmes involve stakeholders in the generation of intelligence and provide the best responses to their changing needs. The interactive features of these platforms facilitate the co-creation of value with international stakeholders. The online social platforms have the ability to develop conversations with several stakeholders, and the insights generated from these interactions are used to better serve their needs (Wang & Kim 2017). Social media technologies enable the firm to act on new

business opportunities by acquiring and disseminating external stakeholders' knowledge (Garcia-Morales, Martín-Rojas & Lardón-López 2018). These arguments mirror the findings of the thesis. The active interactions between MNEs and stakeholders on social media platforms facilitate the flow of information that explains their changing needs. Moreover, engaging and interesting conversations with key leads inform a better understanding of unexpressed needs. Thus, the strategic use of social media technologies predicts the development of dynamic marketing capabilities.

6.3.3 The Relationship between SMT and AMC

The social media technologies relate positively and significantly to adaptive marketing capabilities. This finding explains that MNEs' strategic use of online platforms produces vigilant and experimentation capabilities. The interactive and real-time nature of social media conversations informs better firm learning abilities from weak signals. Besides, social media tools allow experiments on a smaller scale and faster responses from engaged stakeholders. These insights inform faster adaptation to changing markets environment and prevent the inertia of previous experiences. Social media technologies reflect the outside-inside orientation of adaptive marketing capabilities. The customer behaviors changed dramatically in the digital age, and social media platforms capture these changes, even the weak ones. This capability informs the MNEs to develop capabilities that put the foreign stakeholders changing needs at the centre of their adaptive processes and business models. These arguments remain valid as well for the open marketing abilities of adaptive capabilities. MNEs and foreign stakeholders collaborate on social media platforms and share valuable insights that are beneficial for both parties. The use of stakeholders' peripheral resources serves the MNEs' continuous learning ability to adapt to changing environments such as international markets.

Day (2011) suggests that deep customer insights influence the development of MNEs' vigilant learning capabilities. These analytics are amplified by warning systems and emerging technologies. These capabilities require useful observations of how customers process data and behave on social media platforms. Besides, vigilant firms can sense customers' latent needs and adapt with an open-minded approach. The strategic use of social media technologies enables a vigilant learning environment. The social media analytics enhances the MNEs' awareness of customer behavior changes in real-time. Besides, these data stimulate a learning abilities and contribute to the development of adaptive marketing capabilities. Bolat, Kooli and Wright (2016) indicate that social media strategic capabilities improve the firms' understanding of stakeholders' online data consumptions. Also, the analysis of users generated content is an essential requirement for MNEs' vigilant market learning abilities. This result is in line with the thesis empirical findings, which demonstrate that social media analytics and engagement programmes contribute to the development of adaptive marketing capabilities.

Muninger, Hammedi and Mahr (2019) highlight the strategic capabilities of social media during innovation processes, which capture the experimental capabilities of adaptive organisations. The study suggests that social media methods such as contests, gamification, and crowdsourcing enhance knowledge acquisition and the idea generation. This information is used to develop innovative products and services that consider latent customer needs. Besides, these new offerings are speedily tested using the engagement and interactive features of social media technologies. The thesis results mirror these findings and explain that the strategic use of social media technologies, along with data analytics and active experimentation, contribute to the development of new and adaptive capabilities.

Felix, Rauschnabel and Hinsch (2017) pointed out that strategic social media marketing might be used for genuine collaboration with stakeholders while taking advantage of interactive online tools. This

marketing scope offers an open and permeable marketing culture and network structure. This conceptualisation is in line with the requirements of vigilant market learning and open marketing culture (Day 2011). The positive relationship between social media technologies and adaptive marketing capabilities proposes that strategic use of these platforms with interactive content and data analytics predicts the development of vigilant capabilities in MNEs' firms. These organisations act on deep insights and experiments to provide value for international stakeholders. Besides, their marketing culture is opened to integrate information from peripheral resources and capabilities.

6.4 The Relationship between SMT and Firm Cultural Intelligence

The findings of the result chapter revealed a positive and significant relationship between social media technologies and firm cultural intelligence. This association proposes the strategic use of the platforms to understand foreign stakeholders' expectations. The use of social media analytics supports the development of processes that consider the competitive risks of international markets. The engagement programmes of social media networks and the information generated from these conversations are requirements of effective knowledge sharing with foreign stakeholders. Moreover, the collaboration between MNEs' firm and international stakeholders on social media platforms emphasises the higher level of trust and enhances the organisations' reputation in these markets.

Nakayama and Wan (2018) found that social commerce presents a medium for customers from different cultures to share their preferences, opinions, and attitudes toward a product or service. Besides, the valuable insights from their research revealed that cultural differences produce different sentiments or ratings toward the providers' products or services. The cultural values influenced the usability of social media applications and the continuation of its use. For example, the individual that scores high on

collectivism intends to use these applications continuously, since it highlights group environments (Hoehle, Zhang & Venkatesh 2015). These results are consistent with the thesis findings, which indicate the decisive role of social media platforms in the development of culturally intelligent processes that consider the expectations of foreign stakeholders. Besides, the information collected from these mediums provides culturally intelligent MNEs' the advantages to design appropriate standard operating procedures, and consider the preferences and cultures of other stakeholders.

Ray (2014) clarified the importance of using social media platforms to mitigate the adverse effects of different cultures on knowledge transfer. The findings suggest that the interactive tools and features of social media platforms can overcome the barriers of specific cultural traits. Besides, the trust in the messages on social media platforms is affected by users' culture, which might impact the relationships between the firms and their stakeholders, and predict the future use of these online networks (Pentina, Zhang & Basmanova 2013). These outcomes are in line with the thesis finding, which indicates that these online platforms predict adequate information sharing processes, and support MNEs firms to design culturally compatible governance mechanisms with foreign stakeholders. Thus, the knowledge of stakeholders' cultural usage of social media platforms presents a learning ability for MNEs' to elevate their level of cultural intelligence.

Hsu et al. (2015) study posit that cultural differences influence the stakeholders' motivations to continue using social media platforms. For example, individualistic cultures are more information seekers while using the online social networks. However, socialisation is the main factor for collectivistic cultures to continue using social media. Additionally, the personal information disclosure and privacy concerns on social media platforms are impacted differently in dissimilar cultures. Thus, social media engagement behaviors inform the MNEs' firm information-sharing strategies, which should consider the cultural

values of foreign stakeholders. These findings provide additional evidence on the positive and significant relationship between the strategic use of social media platforms and firm cultural intelligence. The stakeholder's engagement and effective data analytics of these conversations on social media networks contribute to the MNEs' cultural intelligence resources.

6.5 The Relationships between IMC and Firm Performance

6.5.1 The Relationship between SMC and MP

The result chapter highlights the positive relationship between static marketing capabilities and firm performance. This finding is expected and consistent with the resource-based theory (Barney 1991). The MNEs' marketing mix capabilities are essential resources to deliver value and fulfill stakeholders' needs. The pricing capabilities allow the firm to generate value from stakeholders, who perceive the MNEs' prices of services or products as fair in comparison to the competitors. Besides, these firms communicate pricing strategies and structures to suppliers and partners effectively. On the other hand, the static marketing capabilities provide abilities for the MNEs firms to develop their existing products and collaborate with suppliers, partners, and customers for successful performance. These capabilities enhance the firms' communications performance and support the development of marketing programmes that highlight the value of the MNEs' offerings effectively.

The association between static marketing capabilities and firm performance is consistent with the conceptualisation of Day (1994), which proposes that these capabilities are skills, accumulated knowledge, and challenging to copy routines that enable business processes to be performed (Day 2011). The result of the thesis is consistent with several empirical studies that confirmed the positive and

significant contributions of these specialised capabilities to firm performance. For example, Vorhies and Morgan (2005) confirmed positive relationships between these marketing capabilities and performance using a benchmarking procedure of top-performing firms in the United States of America. Besides, Morgan, Katsikeas and Vorhies (2012) found that these specialised capabilities predict firm performance by allowing the effective execution of export marketing strategies, which remain consistent with the thesis results. Contrary to the research findings, Zou, Fang and Zhao (2003) found that only pricing capabilities and communication capabilities positively affect the performance of the firm, and these effects are either partially or fully mediated by low-cost advantage and branding advantage, which was not tested in this thesis. Further, Zou, Fang and Zhao (2003) study did not explain direct relationships between distribution capabilities, product development capabilities, and firm performance. This difference in results might be related to the origin of the firms and the mode of entries deployed in their international ventures. The selected firms in the thesis are MNEs that invested direct resources and accumulated knowledge, which might explain the direct contribution to firm performance. On the other hand, Zou, Fang and Zhao (2003) used the Chinese exporters to study the relationship between capabilities and performance, which might explain the role of positional advantages on the relationship between pricing, communication capabilities, and firm performance. Additionally, the firms' financial resources impact positively product development capabilities, which contribute to the export venture performance (Kaleka 2011). This finding might explain the non-significant relationship between product development capabilities and export performance in the Chinese context.

The findings provide evidence for the positive relationship between marketing capabilities and firm performance. The direct relationship in this thesis is consistent with the studies conducted using firms from developed countries. On the other hand, the relationship between marketing capabilities and firm

performance is indirect and mediated by effective marketing strategy implementation or relational capabilities for firms originating in emerging markets (Pham, Monkhouse & Barnes 2017).

6.5.2 The Relationship between DMC and MP

The direct relationship between dynamic marketing capabilities and firm performance was not significant. This result did not support the hypothesised path between the two variables and implies the test of indirect association between these capabilities and performance. The result of the mediation test indicates an indirect relationship between dynamic marketing capabilities and firm performance, and static marketing capabilities mediate this relationship. These findings might be explained by the inherent inside-out perspective of dynamic capabilities theory, which implies the loss of sensitivity to weak signals and fast market changes in the digital age (Day 2011). Besides, the indirect contribution of these dynamic capabilities might be explained by their influence on other types of capabilities, which are the static marketing capabilities in the case of this thesis. This argument is consistent with the original conceptualisation of dynamic capabilities, which implies that these capabilities build, integrate, and reconfigure internal and external firm competencies (Teece, Pisano & Shuen 1997). Kachouie, Mavondo and Sands (2018) found that the impact of dynamic marketing capabilities on firm performance is mediated by operational marketing capabilities. Additionally, Morgan, Vorhies and Mason (2009) found that market orientation did not relate to subjective firm performance; however, the complementary effect with organisational capabilities contributes to firm performance. These results are consistent with the thesis finding, which demonstrates that proactive market orientation is a dynamic marketing capability, which enables the MNEs' to build, integrate, and reconfigure their marketing mix capabilities to achieve higher performance in international markets.

On the other hand, the thesis finding contradicts the result of other studies that found a direct and positive relationship between dynamic marketing capabilities and firm performance. For example, Fang and Zou (2009) confirmed the direct contribution of dynamic marketing capabilities on firm performance in international joint ventures of Chinese firms. Besides, Guo et al. (2018) found that the direct relationship between these capabilities and firm performance is significant as well in the Chinese business to business firms. These contradicting results imply a more critical reflection on the context, and the operationalisation of dynamic marketing capabilities construct. First, the context of this thesis differs from previous studies since the MNEs firms represent a foreign direct investment, which was not similar to the previous studies. Besides, the thesis dynamic marketing capabilities construct is operationalised as proactive market orientation, which is line with Barrales-Molina, Martínez-López and Gázquez-Abad (2013), and Kachouie, Mavondo and Sands (2018) definition of dynamic marketing capabilities. However, Fang and Zou (2009) and Guo et al. (2018) operationalise the construct as cross-functional capabilities. The former explanation is in line with the arguments of Foley and Fahy (2009) and Fahy et al. (2000), which proposed the modelling of market orientation within a capability perspective, and emphasised that the relevance of empirical studies should be discussed critically within a specific firm or industry contexts. Besides, this argument mirrors the research of Menguc and Auh (2006, p.65), who suggest: “the need to theorise market orientation as a dynamic capability in combination with other complementary resources.”

The results and the discussion of the relationship between dynamic marketing capabilities and firm performance provide additional insights on how these capabilities contribute to firm performance. The findings of the thesis supported an indirect relationship with firm performance mediated by static marketing capabilities. This result is obtained in the context of MNEs’ foreign direct investment and the operationalisation of dynamic marketing capabilities as proactive market orientation.

6.5.3 The Relationship between AMC and MP

The thesis findings explain a positive and significant relationship between adaptive marketing capabilities and firm performance. This result supports the developed hypothesis and consistent with the original theoretical conceptualisation (Day 2011). The fast changes in the market highlight new challenges for MNEs in the international markets. These obstacles are emphasised by the emergence of new technologies and continuous changes in customers' preferences and needs. The new adaptive capabilities have an outside-in orientation and support the firms in exploring the markets independently from the boundaries and constraints. According to Mu et al. (2018), outside-in marketing capabilities relate positively to firm performance and provide knowledge resources for other types of capabilities in complex and fragmented markets. The context of this thesis is the international markets, which represent higher velocity, complexity levels, and fast market shifts accompanied by knowledge sharing technologies. Accordingly, these capabilities provide a higher contribution to the firm performance as compared to other types of capabilities. The thesis result is consistent with Guo et al. (2018) empirical study, which demonstrated that adaptive marketing capabilities are essential contributors to firm performance, and their impacts outperform the inside-out marketing capabilities.

The result of this research enriches the theoretical discussion that underpins the firms' strategic orientations and the contributions to competitive advantage and firm performance. For instance, the inside-out and the outside-in strategic postures contribute to firm performance. However, the effectiveness of these associations is contextual and impacted by industry type, country economic, and cultural conditions. Day (2014) argued that inside-out strategic thinking provides internal processes efficiencies and short-term cost reductions, which might imply firm myopia in changing environments. Besides, the meta-analysis conducted by Saeed et al. (2015) found that the outside-in strategic orientation

has a stronger impact on firm performance, which is consistent with the thesis findings. The adaptive marketing capabilities support the MNEs' ability to recognise the gap in the changing markets before competitors. These proactive capabilities start with stakeholders' latent needs and enable the firm to create new value for stakeholders; thus, it provides offerings that are difficult to imitate by the competition and predicts higher performance.

In-depth customer insights enable the development of adaptive marketing capabilities. These data analytics procedures support the firms' decision-making and signal the changes in stakeholders' needs. Besides, the MNEs face double the challenges in foreign markets than their domestic markets. These capabilities allow small experiments and speedily adaptation to stakeholders' new behaviors. Erevelles, Fukawa and Swayne (2016) argued that the analysis of customers' big data and the integration of these insights within the firms' adaptive marketing capabilities contribute to sustainable competitive advantage. These suggestions were confirmed empirically in the thesis.

Recently, Hunt and Madhavaram (2019) propose the role of the two strategic orientations in the global markets. The inside-out approach informs reactive innovations that respond effectively to the market place. Additionally, outside-in implies proactive offerings that shape the marketplace. Accordingly, the thesis introduced a path between dynamic marketing capabilities and adaptive marketing capabilities to understand how dynamic marketing capabilities relate to performance in the presence of adaptive capabilities, and what is the effect of a direct relationship on adaptive capabilities extracted variance. The results demonstrate adequate goodness of fit indices (CMIN 12.426 $p=.087$; CMIN/DF=1.775; SRMR=.0409; TLI=.886; CFI=.980; RMSEA=.074). Besides, the analysis indicates a positive and significant association between the two variables ($\beta= 0.373$, $t\text{-value}= 4.402$, $p < .001$), and an indirect relationship ($\beta= 0.16$, $p < .001$) between dynamic marketing capabilities and firm performance. Thus,

adaptive marketing capabilities mediate this relationship. On the other hand, the presence of this relationship increases the variance extracted in adaptive marketing capabilities from 12% to 22%.

The finding provides additional insights into the current theoretical discussion of firms' strategic views and performance (Hunt & Madhavaram 2019; Day 2014). The result underlines that the benefits of dynamic marketing capabilities will be realised in MNEs firms that possess adaptive marketing capabilities. On the other hand, the presence of dynamic marketing capabilities is essential for developing higher level of adaptive marketing capabilities. Thus, the MNEs' success in international markets implies sufficient accommodation and balance between the outside-in and inside-out strategic views.

6.6 The Relationships between IMC and Firm Performance under Levels of Environmental Turbulence

6.6.1 The Relationship between SMC and MP under Low and High Levels of Environmental Turbulence

The result of the thesis explains a positive and significant relationship between static marketing capabilities and firm performance under a low level of environmental turbulence. On the other hand, this association becomes nonsignificant when the level of turbulence increased. This finding highlights that the firms' marketing mix capabilities contribute to firm performance only when the markets are stable. The ability to fairly price the offerings, collaborate with suppliers and effectively communicate the product or service values with several stakeholders provide MNEs with a competitive advantage. However, this outcome is not sustainable during fast changes in customers' preferences and market trends.

The findings are consistent with the premises of the dynamic capability theory (Teece, Pisano & Shuen 1997) and Day (2011) theoretical argument of the firms' strategic orientations. These two schools of thought explain that the static nature of these capabilities reduces the firms' ability to capture the dynamic changes in the markets. Teece, Pisano and Shuen (1997) stated that firms are stuck with what they have and proposed the renewal of organisational skills and functional competencies to match the requirements of market changes. This theoretical argument is emphasised by Day (2011), which highlights that organisational rigidities influence the firms to keep doing what they master long past the point of obsolescence. Marketing mix capabilities contribute to the firm performance at a point of time; however, in high velocity and complex markets, these exploitive capabilities can not produce innovative ways to deliver customer value or adopt new channels to reach these customers (Day 2011). Thus, static marketing capabilities contribute to firm performance only in low turbulent environments.

The thesis finding is consistent with Guo et al. (2018) empirical study, which demonstrated that the positive influence of static marketing capabilities on firm performance is achieved only in a low turbulent environment. Besides, the research highlighted that too much focus on marketing mix capabilities in a highly turbulent environment may limit the ability of the firms to understand the market changes. This argument is explained by the nonsignificant contribution of static marketing capabilities to firm performance in the thesis. Vorhies (1998) did not find a significant relationship between environmental turbulence and the development of static marketing capabilities. On the other hand, Murray, Gao and Kotabe (2010) found that the contributions of these capabilities to firm performance depend on how effective these firms are deploying the knowledge acquired from market orientation activities in foreign markets. This information acquisition programmes should be enhanced by other firm coordination mechanisms to build useful marketing mix capabilities. This outcome captures the thesis result, which

argues that these capabilities are static and work within accepted market boundaries. Thus, in high turbulent environments, these static marketing capabilities did not contribute to firm performance.

6.6.2 The Relationship between DMC and MP under Low and High Levels of Environmental Turbulence

The research findings highlight that the direct relationships between dynamic marketing capabilities and firm performance were not significant and the levels of environmental turbulence did not moderate this association. However, the previous discussion suggests that these dynamic capabilities indirectly contribute to performance through the mediation effects of static marketing capabilities or adaptive marketing capabilities. Thus, the thesis proceeds with the tests of this indirect relationship under low and high environmental turbulence. First, the model was specified by adding a path between dynamic marketing capabilities and static marketing capabilities. Second, another model was specified by adding a path between dynamic marketing capabilities and adaptive marketing capabilities. The results of the first model demonstrate adequate goodness of fit indices (CMIN 27.467 $p=.037$; CMIN/DF=1.717; SRMR=.0492; TLI=.846; CFI=.956; RMSEA=.071). Besides, the analysis indicates a significant indirect relationship ($\beta= 0.11$, $p= .015$) between dynamic marketing capabilities and firm performance under a low turbulent environment, and this association is mediated by static marketing capabilities. However, under a highly turbulent environment, this indirect relationship becomes insignificant ($\beta= 0.06$, $p= .273$), and static marketing capabilities could not explain this association. On the other side, the adaptive marketing capabilities mediation tests reveal opposite results. The findings of the second model demonstrate adequate goodness of fit indices (CMIN 30.711 $p=.015$; CMIN/DF=1.919; SRMR=.0524; TLI=.802; CFI=.943; RMSEA=.081). Besides, the analysis indicates significant indirect relationships ($\beta= 0.19$, $p= .015$) between dynamic marketing capabilities and firm performance under low turbulent environment, and highly turbulent environment ($\beta= 0.07$, $p= .034$). Thus, adaptive marketing capabilities

explain the relationship between dynamic marketing capabilities and firm performance under all levels of environmental turbulence.

This result is consistent with the study of Guo et al. (2018), which demonstrated that dynamic marketing capabilities had the same direct effects on performance under low and high environmental turbulence. However, the thesis finds that dynamic marketing capabilities contribute indirectly to firm performance under a highly turbulent environment, and this benefit is only relevant in firms that developed adaptive marketing capabilities. This outcome supports the theoretical argument of Eisenhardt and Martin (2000), which propose that dynamic capabilities are required in high-velocity markets. However, their contributions to competitive advantage are not sufficient. Additionally, these capabilities use new knowledge and well-known learning mechanisms for the evolution and production of adaptable outcomes. Thus, vigilant market learning capabilities and not static marketing capabilities explain how these dynamic capabilities perform in a high turbulent environment. This argument is confirmed by the research of Menguc and Auh (2006), who found that the complementary effect of firm innovativeness and market orientation is a dynamic capability that contributes to competitive advantage.

Previous studies attempt to explore the moderation effect of environmental turbulence on firm performance. However, the results were not consistent and depended on how dynamic marketing capabilities were operationalised. Besides, the measurements of the outcome are not consistent between these studies. For example, Fang and Zou (2009) found that market dynamism moderates the relationship between cross-functional capabilities and firm financial performance positively. However, this relationship was marginally moderated with the competitive advantage. Further, Song et al. (2005) explained that the strength of the relationship between these capabilities and performance was more significant in a low turbulent environment.

The thesis findings provide new insights that explain the relationship between dynamic marketing capabilities and firm performance in international markets. The result proposes that these dynamic capabilities are not related directly to performance, and other capabilities mediate their indirect contribution to firms' outcomes under low environmental turbulence. Further, these capabilities predict firm performance under a high turbulent environment only when complemented by adaptive marketing capabilities.

6.6.3 The Relationship between AMC and MP under Low and High Levels of Environmental Turbulence

The result of the research explains that the levels of environmental turbulence did not moderate the relationship between adaptive marketing capabilities and firm performance. The adaptive marketing capabilities contribute equally to performance in a low and high turbulent environment. The research hypothesised that the influence of these capabilities is more considerable in a highly turbulent environment. However, the results show that adaptive marketing capabilities are essential to driving performance under all environmental situations. This outcome explains that the international operations of MNEs are not only affected by the foreignness of these markets; also, the customer preferences and marketing channels are evolving at the internet speed. Thus, the development of these adaptive capabilities is essential to mitigate the double challenges of foreign markets and contribute to firm performance.

The thesis result confirms the theoretical argument of Day (2011), which suggested the need to develop adaptive marketing capabilities to close the marketing gap between the resources available and the resources required to achieve performance in highly volatile and complex markets. The context of this research is the foreign market, and the sample under study is MNEs that have foreign direct investments in the region. Thus, vigilant market learning and open marketing capabilities enhance these firms'

performance in all levels of turbulent environments. The thesis result extends the study of Guo et al. (2018), which was the first empirical research to explore the importance of these capabilities in fast-changing markets. The findings confirmed the benefits of vigilant market learning capabilities, experimentation capabilities, and open marketing capabilities for MNEs successful outcomes in international markets.

The result provides additional insights into the marketing capabilities and firms' strategic view paradigms. The outside-in approach seems to be more effective as a starting point in sustaining firms' competitive advantage in the digital age and foreign markets. This argument confirmed the meta-analysis results of Saeed et al. (2015), which found that the outside-in strategic orientation predicts firm performance under higher technological intensity. However, the inside-out strategic view is more likely to contribute to performance when complemented by an outside-in orientation. The technological disruptions such as the speed of the internet and the emergence of social media platforms imply dramatic changes in customer preferences and market trends. The fragmented markets are changing continuously, which informs a proactive approach to sense and respond quickly to stakeholders' needs. The research finding provides evidence that firms acting on weak signals, speedily experimenting, and benefiting from partners' resources are the premises of success in the digital age and international markets. Thus, MNEs that invest in resources to develop adaptive marketing capabilities are probably more ready to sustain their competitive advantage and achieve the desired performance in foreign markets.

6.7 The Relationship between Firm Cultural Intelligence and Firm Performance

The construct of cultural intelligence at the firm level is considered new and in its infancy phase. This thesis is considered one of the few studies that attempt to develop the cultural intelligence measurement

scale at the firm level. Further, this research aims to understand how firm cultural intelligence relates to firm performance, and if international marketing capabilities mediate this association. The finding highlights a positive and direct relationship between firm culture intelligence and firm performance. Besides, this association was not mediated by international marketing capabilities. The results support the broader guidelines of the resource base theory (Barney 1991), which explains that valuable, rare, inimitable, and non-substitutable resources predict the firms' success and competitive advantage. The firm culture intelligence is a specific firm resource that enables the effective management of competitive factors in cross-cultural environments. Besides, objective and subjective foreign stakeholders' cultural values are embodied in the processes, and reconfigured as per the dynamic of the international markets. Thus, the results nurture the dynamic capability paradigm and explain a direct relationship between firm cultural intelligence and performance.

The findings of the thesis extend the work of Ang and Inkpen (2008), which provided the theoretical conceptualisation of cultural intelligence at the firm level, and defined it as a form of organisational intelligence necessary to achieve performance in international ventures. The empirical analysis confirmed that culturally intelligent firms develop, manage, and enhance their processes for successful performance in international markets. Besides, the finding of this thesis extends the previous stream of studies that found positive relationships between individual or group cultural intelligence and cross-borders performance (Ang et al. 2007; Ramalu et al. 2012; Groves & Feyerherm 2011; Hansen et al. 2011; Rockstuhl et al. 2011).

Few scholars attempt to explore the impact of firm cultural intelligence on performance. However, the context, the measurement methods, and the achieved outcomes were significantly different. For example, Chen, Liu and Portnoy (2012) found that the aggregation of motivational cultural intelligence to the

firm-level relates positively to firm cultural sales. On the other hand, Yitmen (2013) found a positive relationship between organisation cultural intelligence, cultural competences, and strategic alliance performance in international contracting firms. These studies contribute to the cultural intelligence concept and provide new insights into the outcomes of cultural intelligence. The thesis extends this knowledge to the MNEs and confirms the contribution of firm cultural intelligence to performance in international markets.

6.8 The Relationship between Social Media Technologies and Firm Performance

The result highlights that social media technologies relate indirectly to firm performance, and international marketing capabilities fully mediate this relationship. The finding is consistent with the resource-based and dynamic capabilities theories (Barney 1991; Teece, Pisano & Shuen 1997). The social media technologies are MNEs' resources that enhance communications with stakeholders, facilitate their engagements with the brand or services, and provide data insights about their current and emerging needs. These resources are deployed by MNEs' international marketing capabilities effectively to achieve the desired performance in international markets. For example, the communication capabilities of these firms use the interactive tools of social media platforms to increase the level of products or services awareness. On the other hand, the proactive market orientation capabilities deploy the engagement programmes to understand stakeholders' unexpressed needs and contribute to firm performance. Besides, adaptive marketing capabilities benefit from social media analytics to detect weak market signals faster than competitors and provide higher value to international stakeholders.

The thesis result explains that the adoption of social media platforms without the possession of international marketing capabilities could not lead to firm performance. This argument is in line with the recent study conducted by Foltean, Trif and Tuleu (2018), which found that the customer relationship

management capabilities mediate the relationship between social media technologies and firm performance. Thus, social media technologies impact the development of capabilities, and the effective deployment of these resources contributes to firm performance. This finding is in line with the study of Trainor et al. (2013), which highlighted that performance occurred when social media technologies are integrated with other organisational resources to produce firm-level capabilities. Also, the thesis result confirmed the argument of Pratono (2018), which proposed that the exploitation of social networks is not sufficient to generate profits; however, the use of these networks improves the firms' pricing capabilities, which contribute to performance.

The analysis of the relationship between social media technologies and firm performance provides empirical evidence on the effective applications of resource-based and dynamic capabilities theories. Previous scholars used these theories and extended the knowledge on the effective use of social media platforms (Garcia-Morales, Martín-Rojas & Lardón-López 2018; Wang & Kim 2017). These studies confirmed the effective use of social media technologies to develop specific firm-level capabilities, such as customer relationship management capabilities. On the other hand, the thesis provided a broader approach and confirmed the benefit of using social media technologies to develop different types of capabilities. The findings of the thesis confirmed that social media technologies relate significantly and positively to static, dynamic, and adaptive marketing capabilities. Thus, the MNEs' effective deployment of these social networks resources contributes to firm performance.

6.9 The Mediation Effect of Firm Cultural Intelligence on the Relationships between Social Media Technologies and International Marketing Capabilities

The thesis findings contribute to the social media stream of research in international markets. Previous studies emphasise the active role of these platforms in communicating and co-creating value with multiple stakeholders (Berthon et al. 2012; Kane 2015; Rathore et al. 2016; Gensler et al. 2013; Felix, Rauschnabel & Hinsch 2017). On the other hand, many scholars attempt to explore how the adoption of social media technologies contributed to firm performance and proposed that this relationship is indirect and mediated by firm capabilities (Foltean, Trif & Tuleu 2018; Trainor et al. 2013; Pratono 2018). Besides, another stream of research confirmed the role of culture on the stakeholders' usage of these online platforms (LaRose et al. 2014; Kim, Sohn & Choi 2011; Gevorgyan & Manucharova 2009). Thus, the findings of this thesis extend the previous literature by explaining how social media technologies contribute to the development of international marketing capabilities. The results demonstrate that firm culture intelligence partially mediates the relationship between social media technologies and static marketing capabilities. Besides, this form of intelligence explains the impact of online platforms on dynamic marketing capabilities.

This result informs the strategic use of social media platforms in foreign markets from the lens of firms' cultural intelligence. The engagement programmes might consider the objective and subjective cultural values of international stakeholders to support effective communication and benefit from these interactions to understand their latent needs. The culturally intelligent firms understand the expectations of foreign partners, suppliers, and customers. These cultural values are embedded in MNEs' processes and routines. Thus, the MNEs firms that complement the use of online platforms with these culturally intelligent processes might develop a higher level of marketing capabilities. Such an argument is

consistent with the study findings of Trainor et al. (2013), which found that the combination of social media technologies and firms' market-driven systems contribute to the development of customer relationship management capabilities.

Interestingly, the relationship between social media technologies and adaptive marketing capabilities was direct and not mediated by the firm cultural intelligence. This finding is consistent with Day (2011) theoretical conceptualisation of adaptive marketing capabilities. The vigilant market learning represents the observation of stakeholders' behaviors and data processing without prejudgments. Social media networks and analytics reveal the shift in buying behaviors and market trends, and provide the MNEs with early insights and deep analytics to implement changes before the competitors. Besides, social media platforms allow fast experimentations, which enhance MNEs quick learning abilities of what will work. The individual and the organisational bias might inhibit the profound insights and explain preconceived judgments (Day 2011). Accordingly, the contribution of social media technologies to adaptive marketing capabilities is direct and not mediated by firm cultural intelligence.

6.10 Summary

This chapter explains that firm cultural intelligence and social media technologies contribute to the development of international marketing capabilities and firm performance. The discussion underlines the mediation of these capabilities between social media technologies and performance, which is consistent with the resource-based and dynamic capabilities theories. While firm cultural intelligence has a direct effect. Besides, the contribution of each level of capabilities on firm performance was discussed under different levels of environmental turbulence, which enriches the literature of firms' strategic views paradigm and the controversies of static, dynamic, and adaptive marketing capabilities. Also, the chapter discussed how MNEs could benefit from social media technologies and cultural firm

intelligence as interconnected resources to enhance the firms' static, dynamic, and adaptive marketing capabilities. The chapter clarifies the convergence or divergence of the thesis findings in comparison with previous and current published studies, as pointed out in the literature review chapter.

CHAPTER SEVEN

CONCLUSION AND CONTRIBUTIONS

7.1 Introduction

The chapter presents the conclusion and the contributions of the thesis to marketing theories and practices. The conclusion highlights the objectives achieved and the answers to the research questions. The theoretical contribution explains how this thesis extends the previous literature and the theories of firm performance in international markets. The practical contribution underlines the adequate use of resources and capabilities to achieve success in foreign markets. Finally, the chapter concludes with the limitations and future recommendations to extend the theoretical arguments presented in this research.

7.2 Conclusion

The firms' need for survival and growth is an essential driver of MNEs to explore international markets. The new markets represent opportunities for these firms to expand in scope and scale. These MNEs can introduce their products and services in foreign markets and create value for international stakeholders. These firms possess extensive resources and rely on these assets to influence the decision-making process of international stakeholders. For example, many multinational firms benefit from the reputation and brand equity achieved in their domestic market to gain market share in international markets. Additionally, many MNE's financial, physical, and human capital resources, may not be available to their local competitors. Thus, these resources provide a competitive advantage and may produce the desired profits for growth and survival. The resource-based theory provided a useful theoretical framework to explain how these firms' resources predict competitive advantage. Accordingly, the

empirical studies followed this conceptualisation, and the findings suggested evidence that valuable, rare, inimitable, and non-substitutable resources contribute to firms' competitive advantage.

The application of the resource-based theory was prominent in explaining the difference in firms' performance at a certain point of time; however, the changes in customers' needs and market dynamics posit a challenge for the assumptions of this theory. The dynamic capabilities theory extends the resource-based theory and explains how and why the firms' resources sustain the competitive advantage in dynamic markets. The premises of the dynamic capabilities theory proposed that the effective integration and reconfiguration of internal and external resources are the sources of sustainable competitive advantage in dynamic and changing environments. The foreign markets are complex and underline new stakeholders' behaviors and needs. Thus, the application of dynamic capabilities theory was useful to explain firms' performance in international markets beyond the possession of various and idiosyncratic resources as the only source of competitive advantage. This theoretical approach was successful in explaining that the effective deployment of resources by firms' dynamic capabilities contributes to performance in foreign markets.

Marketing scholars used the resource-based and dynamic capabilities theories to understand the development of marketing capabilities, and under which conditions these capabilities contribute to firm performance. The resource-based theory was the potential framework to capture the performance of static marketing capabilities such as pricing, product development, distribution, and communication capabilities. On the other hand, the dynamic capabilities theory underpins the development of dynamic marketing capabilities, such as cross-functional marketing capabilities and proactive market orientation capabilities. Further, previous empirical studies explained that institutional factors, such as cultural, economic, and legal differences, minimise the benefit of these capabilities. Also, the environmental

turbulence, such as market and technological intensities, moderate the relationship between these marketing capabilities and firm performance.

The theoretical frameworks of the resource-based view and dynamic capabilities enrich the marketing literature and enhance the understanding of the relationships between firm resources, capabilities, and performance. Despite the previous research evidence, which suggested the influence of institutional factors on the outcomes of these resources and capabilities in international markets, the literature reveals a conceptual question on how the development of these capabilities differs from domestic markets. Additionally, the last decade proposes dramatic and continuous changes in customer preferences and market trends. These changes are emphasised by the emergence of social media technologies, which alters the marketing paradigm and underlines the power of the customers in the creation of value. Accordingly, this thesis attempted to fill the gap in the literature and suggested the complementary of two specific firms' resources to enhance the firms' developed marketing capabilities and support the development of newer adaptive marketing capabilities in the digital age. Besides, this thesis provided additional insights into the current literature by highlighting the differential effects of firms' strategic postures and performance under different levels of environmental turbulence.

The thesis followed a positivist epistemology and a deductive methodology to create the knowledge and evaluate the research findings. This approach is well accepted in the international marketing literature to measure marketing capabilities and performance. Accordingly, the researcher adopted the measurement scales from previous studies and developed hypotheses, which highlighted the relationships between firm cultural intelligence, social media technologies, international marketing capabilities, and firm performance. The statistical tests explained that the measurement scales are valid and reliable, and the

structural equation modeling highlighted the significance and the strength of the associations between the study constructs.

The thesis findings indicate that firm cultural intelligence and social media technologies are specific resources that enable the development of international marketing capabilities. The culturally intelligent firms develop processes and routines that provide better pricing and product development capabilities in their foreign markets. These MNEs understand the expectations of their stakeholders and design governance mechanisms, which highlight valuable distribution capabilities. Besides, these firms communicate with culturally different stakeholders effectively. On the other hand, these MNEs' develop culturally intelligent information strategies, which enhances their dynamic marketing capabilities. Further, culturally intelligent resources might be combined with the strategic use of social media technologies to develop adaptive marketing capabilities.

The thesis found that the strategic use of social media technologies explains the development of static marketing capabilities. These online platforms enhance the MNEs' communication with foreign stakeholders, and the engagement programmes facilitate the discovery of their latent needs. The impact of these social networks on the development of marketing capabilities is enhanced in culturally intelligent firms. Besides, social media technologies facilitate fast experimentation, and data analytics improve the firms' vigilant market learning. Accordingly, the strategic use of social media platforms enables the development of adaptive marketing capabilities.

Previous studies found that the firms' dynamic capabilities integrate, build, and reconfigure the resources to achieve the desired outcomes. This study is consistent with the assumptions of resource-based and dynamic capabilities theory. The findings clarify that international marketing capabilities explain the contribution of social media technologies to firm performance. On the other hand, culturally intelligent

firms develop and design processes that consider the dynamic of the foreign market. Thus, these resources performed as a renewed competency and contributed to MNEs' performance.

This thesis provides empirical evidence that the outside-in strategic orientation contributes to firm performance in a highly turbulent environment higher than the inside-out capabilities. However, the firms' possession of inside-out capabilities is essential to develop these adaptive capabilities. The thesis result confirmed that static marketing capabilities only perform in a low turbulent environment. Nevertheless, these marketing mix capabilities are valuable to execute on the knowledge acquired from the firms' dynamic marketing capabilities.

The finding of the thesis implies that regional marketing managers can enhance their international marketing capabilities through the effective management of their cross-culture interactions and the strategic use of social media technologies. The integration of these online platforms into the firms' culturally intelligent processes improves their marketing mix capabilities and their knowledge of stakeholders' unexpressed needs. Also, these managers might complement their culturally intelligent processes and mechanisms with the strategic use of social media platforms to develop newer capabilities and overcome the fast changes in customers' preferences and market trends.

7.3 Theoretical Contributions

The thesis contributes to the international marketing literature and cultural intelligence concept. During the last two decades, the resource-based and dynamic capabilities theories represented successful frameworks for empirical studies to understand the firms' performance in international markets. Despite the contributions of these studies to the international marketing paradigm, the conceptualisation of firms' resources to develop international marketing capabilities did not differ from the domestic market. Thus, the thesis offers a new conceptualisation to the drivers of international marketing capabilities by

identifying two distinct resources that have unique and complementary contributions to the development of international marketing capabilities. The firm cultural intelligence and social media technologies significantly impact the development of international marketing capabilities and might be incorporated into future MNEs' international marketing research. The firm culture intelligence and the strategic use of social media technologies are essential drivers of static, dynamic, and adaptive marketing capabilities in foreign markets and digital age. Accordingly, this research answered the conceptual question of how the development of international marketing capabilities differs in foreign markets from the domestic ones during the digital era of social media platforms.

The thesis contributes to the stream of research that discusses the firms' strategic view and performance under different levels of environmental turbulence. Previous studies attempted to investigate the controversies between the two strategic approaches and how it affects performance. However, this literature did not achieve consensus or substantial results on how and when these two views contribute to firm performance. The research found empirically that an outside-in orientation to strategy, such as adaptive marketing capabilities, contributes to performance more significant than the firms' inside-out strategic posture in a higher turbulent environment. However, the firms' possession of inside-out capabilities, such as dynamic marketing capabilities, is essential to enhance these outside-in marketing capabilities. Besides, this thesis represents the first attempt to understand the drivers of newer adaptive marketing capabilities from the lens of social media technologies and firm cultural intelligence.

The thesis extends the previous literature on the cultural intelligence concept. Previous studies contributed to the individual level of cultural intelligence and found that cultural intelligence supports the employees and leaders in the management of their cross-cultural assignments or tasks effectively. This research validated the suggested firm-level culture intelligence measurement scale, and confirmed

its contribution to the development of international marketing capabilities and MNEs' performance in international markets. This contribution is two-fold: (1) future studies might use the validated measurement scale of the thesis to develop further the concept of cultural intelligence and (2) the conceptualisation of firm cultural intelligence as an antecedent, and as a complementary resource to develop international marketing capabilities explains the contribution of this thesis to the marketing capabilities literature.

The thesis contributed to the social media stream of research. Previous studies explained that the use of these online platforms contributes to performance through the development of marketing capabilities. Despite the advancement in social media knowledge, the question of how social media technologies develop marketing capabilities in the international markets remains a gap in the literature. The thesis answered this question and found that social media technologies developed international marketing capabilities through the complementary effect of firm culture intelligence. Also, this is the first study that confirmed the impact of social media technologies' strategic use on the development of MNEs' adaptive marketing capabilities.

The thesis conceptual framework provides useful assumptions to understand the MNEs' performance in foreign markets. The complexity of these markets and the continuous changes in stakeholders' preferences inform the MNEs to acquire new resources and develop newer marketing capabilities to sustain the competitive advantage and achieve a higher market position. This study contributes to MNEs' performance in international markets by presenting the antecedents and the outcomes of different levels of marketing capabilities, and under different levels of environmental turbulence.

7.4 Practical Contributions

The international markets provide an opportunity for MNEs to grow in scale and scope and enhance the overall market share and firms' profitability. This evolutionary path is essential for survival when the domestic market size is saturated, and the number of competitors is increasing consistently. Despite the attractiveness of these international markets and the firms' resources and knowledge in their domestic market, these MNEs failed to achieve the desired outcomes in foreign markets. Previous studies highlighted the factors that inhibit the success of these firms in their international ventures. The socio-economic, legal, and cultural values differences of foreign markets underline the potential barriers to MNEs' competitive advantage and performance in these new markets.

The thesis contributes to the MNEs' marketing practices and performance in international markets. The results propose the design and development of processes that assess the subjective and objective cultural values of foreign markets. For example, these intelligent processes support the marketing managers during the evaluation phase of pricing structures and enhance the firms' understanding of competitors' pricing strategies. Thus, the marketing department suggests reasonable products and services prices, which considered the foreign stakeholders' perceived value and competitors' prices. On the other hand, the research proposes that marketing managers who developed useful mechanisms for information sharing with international stakeholders are more knowledgeable of their customers' stated and unexpressed needs. The knowledge acquisition and dissemination could be routinised through traditional face to face meetings or through an integrated online platform for discussion, creative idea generations, and practical task implementations. The thesis implies that marketing managers should evaluate the cultural compatibility, such as data and privacy in selecting their regional stakeholders. These culturally appropriate governance processes enhance the MNEs' collaboration with distributors and suppliers and improve their channel management capabilities.

Previous studies in international marketing highlight the strategic decision of adaptation or standardization. These studies supported product development decision-making in foreign markets. The thesis implies that culturally intelligent firms contribute to the MNEs' product development capabilities. The regional marketing managers could develop their existing product or service portfolios to meet the rising needs of their international customers. These successful developments are the results of the useful evaluation of competitive risks and a greater understanding of foreign stakeholders' expectations.

The findings of the research explained the practical complementary effects of social media technologies and firm cultural intelligence. The thesis implies that marketing managers could develop a vigilant market learning capability through the integration of social media strategic use into the MNEs' culturally intelligent processes. These managers create engagement programmes to interact with their stakeholders in real-time on social media platforms. The analytics of these conversations enhance the MNEs' understanding of stakeholders emerging preferences. The data provided from the online platforms enhance the design of culturally intelligent processes, which contribute to the firms' adaptive capabilities. Besides, social media platforms facilitate fast experimentation programmes, which shortened the learning cycle, enhanced the evaluation of competitive risks, and provide the marketing managers the feedback to build adaptive marketing capabilities.

The thesis suggests new insights into the strategic use of social media in international markets. While previous research highlighted the benefit of social media platforms for communication with foreign stakeholders and the promotion of products and services, other studies proposed the integration of social media platforms into the firms' customer relationship management systems. The thesis informs marketing managers on how to benefit from these online platforms to build marketing mix and dynamic marketing capabilities. For instance, these managers could complement the use of social media with

culturally intelligent standard operating procedures, which evaluate the privacy and the expectations of international stakeholders. Thus, MNEs' marketing managers will be informed about communication preferences or advertising appeals that resonate with foreign stakeholders. On the other side, the integration of social media data analytics into culturally intelligent information sharing processes enhances the MNEs' assessment of stakeholders' latent needs.

The thesis proposes that marketing managers need to build a portfolio of marketing capabilities in international markets and during the digital age. These markets are becoming highly volatile and fragmented, and the emergence of social media platforms explains fast changes in stakeholders' preferences and power. The research implies that MNEs' marketing managers might start with an outside-in strategic approach in a highly turbulent environment. This strategic view is emphasised by the social media engagement programmes and analytics. The proactive learning from these conversations and the valid information sharing processes contribute to the development of adaptive marketing capabilities. This type of capability reinforces the MNEs' ability to meet the fast changes in stakeholders' behaviours, and outperform their rivals in foreign markets. Additionally, marketing managers are required to reconfigure the inside-out capabilities continuously. The strategic integration of social media technologies into the broader elements of MNEs' marketing strategies improves the firms' marketing department communication capabilities. These platforms provide higher reach, awareness, and interactive tools to learn about the cultures of targeted stakeholders. Besides, social media technologies underline micro-segmentation, experimentation, and fast learning abilities. Thus, the marketing managers could develop a portfolio of marketing capabilities by using social media strategically, interacting and stimulating stakeholders' engagement, deploying the data analytics to learn, designing and developing culturally intelligent processes, and measuring effectiveness. These different types of

capabilities enhance the MNEs' readiness to navigate the complexities of foreign markets, and the proliferation of online social networks successfully.

7.5 Theoretical Implications

The result of the thesis advanced the theoretical discussion on the nature of marketing capabilities and how these capabilities contribute to firms' performance in a digitalised world. The previous theoretical assumptions of the resource-based view and dynamic capabilities served the marketing field to understand the impact of resources and capabilities on firm performance for more than two decades. The marketing literature benefits from these conceptualisations to investigate the source of competitive advantage. Marketing scholars proposed different levels of marketing capabilities, such as marketing mix capabilities, customer relationship management capabilities, market orientation capabilities, strategic marketing planning and implementation capabilities, and others. Previous literature confirmed the contribution of these capabilities to performance. However, these studies did not examine the possibility of newer marketing capabilities in a fast-changing digital environment. In international markets, the marketing studies highlighted the impact of culture and other institutional factors on the contribution of these capabilities on firms' performance. However, these works of literature did not investigate how these capabilities are developed in foreign markets when compared to the domestic markets.

The thesis provides a new conceptualisation of the development of international marketing capabilities. The finding proposes that the complementary of strategic social media technologies and firm cultural intelligence contribute to the configuration of static and dynamic marketing capabilities and the development of newer marketing capabilities. The thesis suggests that the knowledge acquired from social media analytics is embedded in culturally intelligent firms' processes, and creates difficult to

imitate complementary that contribute to international marketing capabilities. Besides, the thesis found that adaptive marketing capabilities outperform other types of capabilities in a highly turbulent environment. This result implies the investigation of new marketing capabilities in the digital age.

On the other hand, previous literature discussed the role of social media platforms on current firms marketing capabilities, such as communication and customer relationship management capabilities. However, these studies did not examine how these online social platforms enhance the development of marketing capabilities in international markets. The thesis found that the integration of strategic social media technologies into firms' processes create a complementary effect on the development of marketing capabilities. This finding implies the investigation of possible firms' resources, processes, structure, and human capital that explain the contribution of social media technologies to international marketing capabilities.

The cultural intelligence concept was developed and studied on the individual level. The thesis extends the construct to the firm level. The impact of culture on marketing capabilities and strategies is well documented in the marketing domain. Thus, the thesis provides evidence that cultural intelligence contributes to firms' performance in foreign markets. Competitive and structural cultural intelligence is beneficial to develop static and dynamic marketing capabilities. Besides, cultural intelligence could complement other resources and enhance the development of newer marketing capabilities. This thesis represents the first attempt to incorporate the firm cultural intelligence in international marketing literature. The measurements were valid and reliable, which might facilitate the examination of firms' cultural intelligence outcomes. Besides, the concept might be developed further through the investigation of the drivers of cultural intelligence, and the mediators that explain the relationship with international performance.

The thesis found that the conceptualisation of international marketing capabilities can be extended through the investigation of specific resources complementary that are unique to the foreign markets. Also, the study suggests the development of newer capabilities that consider the new digital era of analytics and the proliferation of many touchpoints of interactions with international stakeholders.

7.6 Practical Implications

The thesis provides marketing managers empirical results on how social media technologies and firm cultural intelligence relate to the development of marketing capabilities and firm performance. The valid and reliable measurement scale of firm cultural intelligence is beneficial for these managers to diagnose how their processes embed the stakeholders' cultural values. On the other hand, the thesis provides practical guidelines for social media usage and integration into the MNEs' processes and routines. The marketing managers should align their social media strategies into the firm overall marketing strategy. Engagement programmes should be stimulating and exciting. Additionally, managers should use the analytics to measure effectiveness and learn about their stakeholders' current and future needs. The marketing managers deployed these data to build culturally intelligent standard operating procedures and enhanced the information-sharing strategies outcomes. The thesis found that these two resources suggest complementary for marketing capabilities development. While firm cultural intelligence relates directly to performance, the association between social media technology use and firms' performance is mediated by international marketing capabilities. Thus, marketing managers' social media activities without strategic directions and marketing capabilities could not provide the targeted outcomes.

The research suggests strategic view assumptions for marketing managers to achieve performance in international markets and digital age. The thesis proposes that in a highly turbulent environment, marketing managers should build an outside-in approach to strategy. This approach emphasises active

listening to stakeholders, and the experimentation for fast learning and adaptive responses. Marketing managers enhance these adaptive capabilities through an in-depth analysis of customers' analytics, and an open marketing approach to benefit from partners' resources and capabilities. The thesis confirmed that success in international markets is not an outcome of one type of capability. Marketing managers should build a portfolio of capabilities. The starting point is the diagnostic of the marketing capabilities gap and the contextual market conditions. Accordingly, these managers could define what are the capabilities that need development or reconfiguration. This portfolio of capabilities enhances the firms' readiness to work with the new contingencies and understand the fast changes in customers' preferences and high-velocity markets.

7.7 Limitations and Recommendations

The thesis contributes to the international marketing literature by investigating the nature of marketing capabilities, and how it relates to firms' performance in foreign markets. The theoretical assumptions of resources-based and dynamic capabilities provide a solid background for the causal relationships between the resources, capabilities, and performance. However, this research has limitations. First, despite that, the thesis findings confirmed the hypothesised relationships between the variables, the cross-sectional nature of survey data collection presents the associations between the constructs at a certain point of time. Thus, the causal directions between the resources, capabilities, and firm performance cannot be generalised as a rule in this thesis. This limitation can be resolved with longitudinal studies, which might validate the directions of the relationship between the study variables. Second, the thesis examined the relationships between two types of resources, three levels of capabilities, and firm performance. Despite the importance of focusing on the resources that distinguish the development of marketing capabilities in international markets, the thesis investigated a limited number

of variables. However, the relationships between resources, capabilities, and performance are more complicated. Future studies might explore the impact of other types of resources, such as financial, physical, and human capital on firm performance. Also, future research might examine the mediators and moderators of the relationship between marketing capabilities and performance. For example, the positional advantage or strategic flexibility variables could explain how adaptive marketing capabilities contribute to firm performance. On the other hand, the influence of transformational leadership or business model variables as moderators is a fertile area for research, and to understand the relationship between marketing capabilities and firm performance.

Third, the firm performance in the thesis model was measured through subjective market performance. Despite testing for common method bias, the triangulation of results with secondary data could provide a more robust explanation of the relationship between marketing capabilities and performance. Future studies might explore as well as other performance outcomes of marketing capabilities, such as new product development performance or financial performance.

Fourth, the thesis was conducted in the United Arab Emirates, and the sample under study was MNEs that establish offices in the country as a foreign direct investment mode of entry. While the country institutional factors and the multi-cultural environment represent a vibrant area to study MNEs' performance in foreign countries, the generalisation of findings to other types of entry modes, such as international joint venture or strategic alliances, should be discussed cautiously. Future studies might consider other contexts and factors to investigate the relationship between capabilities and firm performance.

Fifth, the firm cultural intelligence scale in this thesis did not capture the managerial cultural intelligence dimension, which might represent an opportunity for future studies to refine the measurement scale of

cultural intelligence at the firm level. The thesis highlights an opportunity for marketing scholars to develop the concept of firm cultural intelligence. Thus, future research might investigate how this construct relates to other capabilities, such as relational marketing capabilities, information acquisition capabilities, or cross-functional marketing capabilities. Other studies might examine the drivers of firm cultural intelligence, such as training, human capital skills, and diversity. Another fruitful area for research is to investigate other resources or capabilities that form inimitable complementary with firm cultural intelligence and contribute to firm performance in international.

Sixth, the thesis found that the strategic use of social media technologies predicts the development of newer adaptive marketing capabilities. Future studies might explain how social media technologies interact with other firms' information system resources, such as e-commerce, to develop newer capabilities in the digital age. Research might explore the role of leadership and employees' digital skills to leverage the strategic use of social media into capabilities development and firm performance.

7.8 Summary

This research chapter highlighted the theoretical and practical contributions of the thesis to the international marketing theory. This chapter summarised the limitations and the future recommendations, which might extend the knowledge on the contributions of resources and marketing capabilities on firms' international performance.

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Appendices

APPENDIX 4.1 RESEARCH QUESTIONNAIRE

Section one: Introduction

You are invited to participate in an online survey investigating the drivers of international marketing capabilities. There are no foreseen risks or adverse effects resulting from taking part in this study, which will likely take 10-15 minutes of your time.

The emergence of social media platforms has created opportunities and challenges for multinational firms operating in diverse cultural settings. The purpose of the study is to understand the drivers of international marketing capabilities using social media and greater cross-cultural interactions.

All participant and firm names will remain confidential and individual responses will be reported in summary to protect confidentiality. If you have any questions or concerns related to the questionnaire or study participation, you may contact me on +971504278354 or at joe.hazzam@buid.ac.ae. Alternatively, you may communicate concerns or other issues to my Director of Studies, Professor Stephen Wilkins, on +971 4 2791400 Ext: 490 (stephen.wilkins@buid.ac.ae).

Thank you in advance for taking part in this research.

Kind regards

Joe Hazzam

Section Two:

Firm Cultural Intelligence 7- Point Likert scale ranging from (1) Strongly disagree to (7) Strongly agree

Competitive Cultural Intelligence

FCI1: Our firm values its regional public reputation

FCI2: Our firm has a process to evaluate the competitive risks of regional markets

FCI3: Our firm is able to assess the cultural compatibility of regional stakeholders

FCI4: Our firm understands that factors such as data and privacy must be evaluated in selecting regional stakeholders

FCI5: Our firm has a process to evaluate the proposed financial plan of regional offices

FCI6: Our firm has a process to evaluate the actual financial performance of regional offices

FCI7: Our firm has a process to evaluate the non-financial performance of regional offices

FCI8: Our firm has legal mechanisms to manage risks associated with proprietary firm knowledge

FCI9: Our firm has a system to exit from regional ventures with minimal business disruptions

Structural Cultural Intelligence

FCI10: Our firm understands the expectations of our external regional business stakeholders

FCI11: Our firm knows how to resolve cultural differences with our external regional business stakeholders

FCI12: Our firm knows how to develop culturally appropriate standard operating procedures with our external regional business stakeholders

FCI13: Our firm knows how to design culturally appropriate governance mechanisms to ensure high performance across the operating region

FCI14: Our firm knows how to develop information sharing strategies with our external regional business stakeholders.

Section Three

Social media Technologies 7- Point Likert scale ranging from (1) Strongly disagree to (7) Strongly agree

Social media strategy

SMT1: We have a social media strategy that is based on the firm's key performance goals

SMT2: We have a social media strategy that provides direction for executing our social media activities

SMT3: We have a social media strategy that is closely aligned with our marketing strategy

SMT4: We have a social media strategy that offers a clear definition of our target audience

Stakeholder engagement initiatives

SMT5: We encourage stakeholders to interact with us in social media

SMT6: We create interesting and engaging content to stimulate engagement

SMT7: We respond actively to stakeholder engagement

SMT8: We acknowledge and reward stakeholders who engage with us

Social media analytics

SMT9: We use social media analytics to plan and execute our social media effort

SMT10: We use social media analytics to learn about our audience

SMT11: We use social media analytics to measure our effectiveness

SMT12: We monitor relevant social media analytics

Section Four

Static Marketing Capabilities 7-point Likert scale at “far below major competitors” (1) and “far above major competitors” (7)

Pricing Capability

SMC1: Using pricing skills to respond quickly to competitors’ pricing tactics

SMC2: Communicating pricing structures to business stakeholders

Product Development Capability

SMC3: Develop new products for your region to exploit our R&D investment

SMC4: Successfully launching new products for your region

SMC5: Speedily developing and launching new products for your region

SMC6: Overall new product development systems for our regional market

Distribution Capability

SMC7: Satisfying the needs of customers, suppliers and partners in this regional market

SMC8: Adding value to customers, suppliers and partner’s businesses

SMC9: Collaborating with customers, suppliers and partners in our regional market

SMC10: Providing high levels of support to customers, suppliers and partners

Communication Capability

SMC11: Marketing communication skills and processes

SMC12: Effectively managing marketing communication programmes

Section Five

Dynamic Marketing Capabilities 7- Point Likert scale ranging from (1) Strongly disagree to (7) Strongly agree

DMC1: Our firm seeks to discover unexpressed customer needs

DMC2: Our firm develops solutions to address unexpressed customer needs

DMC3: Our firm engages with customers to find their unexpressed needs

DMC4: Our firm works closely with lead users to understand emerging needs ahead of competitors

Section Six

Adaptive Marketing Capabilities 7-point Likert scale at “far below major competitors” (1) and “far above major competitors” (7)

Vigilant Marketing Capabilities

AMC1: Our firm is highly sensitive to the regional market environment

AMC2: Our firm actively collects extensive marketing information through all media and social networks

AMC3: Our firm is able to forecast market trends in the region based on past history of consumer demand

AMC4: New market information is shared throughout the firm

Adaptive market experimentation capability

AMC5: Our firm conducts market experiments or tests

AMC6: New business models are developed through experimentation

AMC7: Our firm learns from market experiments using new technologies

AMC8: Our firm actively learns from competitors and partners.

Open marketing capability

AMC9: Our firm actively seeks partnerships that are complementary with our resources and capabilities

AMC10: Through coordination and collaboration with our regional partners, we are able to achieve synergy in responding to market signals (even the weak ones) quickly and effectively

AMC11: Through resource integration with our regional partners, our firm gains the capabilities for continuous product and technology innovation

AMC12: Through collaboration and coordination with our regional partners, our firm improves its capability in developing innovative strategies and tactics

Section Seven

Environmental Turbulence (7-point Likert scale at “Strongly disagree” (1) and “Strongly agree” (7))

Market turbulence

ET1: In our business, customer product preferences change quite a bit over time

ET2: It is difficult to predict market and customer preference changes

ET3: It is very difficult to forecast where customer demands in our industry will be in 5 years

ET4: Constant changes in consumer demands bring hidden opportunities for our firm’s business development

Section Eight

Firm Performance (7-point Likert scale at “far below major competitors” (1) and “far above major competitors” (7))

MP1: Market share growth

MP2: New customer acquisition

MP3: Customer satisfaction

MP4: Sales goal achievement

Section Nine:

Demographics

Industry type

- | | |
|--|--|
| <input type="radio"/> Retail | <input type="radio"/> Bank & Finance |
| <input type="radio"/> Media and communication | <input type="radio"/> Transportation and logistics |
| <input type="radio"/> Food & beverage products | <input type="radio"/> Oil and gas |
| <input type="radio"/> Manufacturing | <input type="radio"/> Construction |
| <input type="radio"/> Technology | <input type="radio"/> Education |
| <input type="radio"/> Insurance | <input type="radio"/> Hospitality |
| <input type="radio"/> Healthcare | <input type="radio"/> Other (please specify) |




Firm size in your operating region

- ☐ Less than 100 employees
- ☐ Between 100 and 499 employees
- ☐ Between 500 and 999 employees
- ☐ 1,000 or more employees

Years of experience of the firm in the region

- ☐ Less than 3 years
- ☐ Between 3 and 5 years
- ☐ Over 5 years

APPENDIX 4.2 PROFESSOR INKPEN ITEMS' CHANGE SUGGESTIONS

 Reply  Reply All  Forward




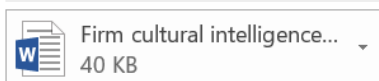
Wed 7/31/2019 2:56 PM

Andrew Inkpen

RE: Firm cultural intelligence items and scale

To joe hazzam

 Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.



Joe,

I attached the file with a few comments. The biggest issue I see is too many of the items are "double-barreled", which means they contain multiple constructs or terms in the same item question. Multiple constructs will confuse the respondent and reduce the quality of your data.

Good luck.

APPENDIX 5.1 COOK'S DISTANCE STATISTICS

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.1718	6.4352	5.1923	.66565	143
Std. Predicted Value	-3.035	1.867	.000	1.000	143
Standard Error of Predicted Value	.083	.340	.174	.053	143
Adjusted Predicted Value	2.9663	6.4068	5.1933	.66745	143
Residual	-2.98502	1.69806	.00000	.80455	143
Std. Residual	-3.631	2.065	.000	.979	143
Stud. Residual	-3.691	2.128	-.001	1.005	143
Deleted Residual	-3.08398	1.80164	-.00096	.84894	143
Stud. Deleted Residual	-3.876	2.156	-.003	1.016	143
Mahal. Distance	.446	23.344	5.958	4.464	143
Cook's Distance	.000	.069	.008	.013	143
Centered Leverage Value	.003	.164	.042	.031	143

a. Dependent Variable: Market Performance

APPENDIX 5.2 MULTICOLLINEARITY STATISTICS

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	Firm Cultural Intelligence	.681	1.469
	Social Media Technologies	.702	1.424
	Static Marketing Capabilities	.511	1.958
	Dynamic Marketing Capabilities	.554	1.805
	Adaptive Marketing Capabilities	.767	1.303

a. Dependent Variable: Market Performance

APPENDIX 5.3 FIRST EXPLORATORY FACTOR ANALYSIS

Pattern Matrix^a

	Component							
	1	2	3	4	5	6	7	8
FCI1	.807							
FCI2	.839							
FCI3	.654		.402					
FCI4	.842							
FCI5	.836							
FCI6	.839							
FCI7	.823							
FCI8	.905							
FCI9	.863							
FCI10	.805							
FCI11	.805							
FCI12	.847							
FCI13	.750							
FCI14	.718							.318
SMT1		.822						
SMT2		.918						
SMT3		.857						
SMT4		.828						
SMT5		.721						
SMT6		.828						
SMT7		.819						
SMT8		.837						
SMT9		.917						
SMT10		.867						
SMT11		.864						
SMT12		.888						
SMC1				.655				-.432
SMC2				.744				-.558
SMC3				.857				
SMC4				.863				
SMC5				.818				
SMC6				.812				
SMC7				.814				
SMC8				.885				
SMC9				.759				
SMC10				.763				
SMC11				.771				
SMC12				.794				
DMC1					.771			
DMC2					.798			
DMC3					.832			
DMC4					.830			
AMC1			.768					
AMC2			.751					
AMC3			.818					
AMC4			.826					
AMC5			.815					
AMC6			.684					
AMC7			.780					
AMC8			.694					
AMC9			.700	.350				.340
AMC10			.769					
AMC11			.754					
AMC12			.790					.327
ET1						.807		
ET2						.836		
ET3						.903		
ET4						.703		
MP1							.925	
MP2							.907	
MP3							.620	
MP4							.764	

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

APPENDIX 5.4 SECOND EXPLORATORY FACTOR ANALYSIS

Pattern Matrix^a

	Component							
	1	2	3	4	5	6	7	8
FCI1	.844							
FCI2	.830							
FCI3	.662							
FCI4	.879							
FCI5	.828							
FCI6	.848							
FCI7	.834							
FCI8	.923							
FCI9	.862							
FCI10	.820							
FCI11	.823							
FCI12	.886							
FCI13	.787							
FCI14	.779							
SMT1		.818						
SMT2		.901						
SMT3		.859						
SMT4		.823						
SMT5		.717						
SMT6		.813						
SMT7		.802						
SMT8		.837						
SMT9		.909						
SMT10		.868						
SMT11		.871						
SMT12		.884						
SMC1				.628				
SMC3				.854				
SMC4				.841				
SMC5				.805				
SMC6				.808				
SMC7				.790				
SMC8				.863				
SMC9				.730				
SMC10				.729				
SMC11				.750				
SMC12				.775				
DMC1					.796			
DMC2					.830			
DMC3					.872			
DMC4					.849			
AMC1			.765					
AMC2			.747					
AMC3			.824					
AMC4			.824					
AMC5			.811					
AMC6			.681					
AMC7			.778					
AMC8			.698					
AMC9			.689					
AMC10			.764					
AMC11			.752					
AMC12			.786					
ET1						.812		
ET2						.789		
ET3						.861		
ET4						.720		
MP1							.929	
MP2							.911	
MP3							.622	
MP4							.768	

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

APPENDIX 5.5 RELIABILITY STATISTICS

Inter-Item Correlation Matrix

	FCI1	FCI2	FCI3	FCI4	FCI5	FCI6	FCI7	FCI8	FCI9	FCI10	FCI11	FCI12	FCI13	FCI14
FCI1	1.000	.695	.413	.779	.699	.768	.759	.745	.610	.754	.677	.718	.665	.676
FCI2	.695	1.000	.459	.631	.718	.674	.667	.683	.596	.718	.643	.623	.588	.659
FCI3	.413	.459	1.000	.458	.335	.397	.440	.461	.476	.462	.497	.508	.468	.421
FCI4	.779	.631	.458	1.000	.676	.734	.732	.719	.598	.754	.717	.782	.722	.664
FCI5	.699	.718	.335	.676	1.000	.827	.771	.660	.526	.701	.609	.623	.625	.569
FCI6	.768	.674	.397	.734	.827	1.000	.799	.681	.576	.736	.673	.734	.642	.636
FCI7	.759	.667	.440	.732	.771	.799	1.000	.825	.632	.758	.706	.764	.726	.694
FCI8	.745	.683	.461	.719	.660	.681	.825	1.000	.674	.710	.696	.712	.669	.726
FCI9	.610	.596	.476	.598	.526	.576	.632	.674	1.000	.642	.626	.693	.640	.615
FCI10	.754	.718	.462	.754	.701	.736	.758	.710	.642	1.000	.837	.805	.749	.689
FCI11	.677	.643	.497	.717	.609	.673	.706	.696	.626	.837	1.000	.842	.773	.714
FCI12	.718	.623	.508	.782	.623	.734	.764	.712	.693	.805	.842	1.000	.881	.810
FCI13	.665	.588	.468	.722	.625	.642	.726	.669	.640	.749	.773	.881	1.000	.800
FCI14	.676	.659	.421	.664	.569	.636	.694	.726	.615	.689	.714	.810	.800	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
FCI1	72.99	221.542	.833	.745	.962
FCI2	73.66	220.281	.770	.688	.963
FCI3	73.78	230.608	.525	.337	.968
FCI4	73.39	214.831	.832	.736	.962
FCI5	73.48	220.266	.771	.781	.963
FCI6	73.29	215.448	.823	.808	.962
FCI7	73.80	215.670	.864	.817	.961
FCI8	73.53	216.096	.832	.777	.962
FCI9	74.10	220.342	.727	.571	.964
FCI10	73.60	216.481	.867	.804	.961
FCI11	73.83	218.399	.838	.790	.962
FCI12	73.69	212.358	.887	.889	.961
FCI13	73.69	215.369	.832	.825	.962
FCI14	73.62	217.210	.805	.755	.963

Inter-Item Correlation Matrix

	SMT1	SMT2	SMT3	SMT4	SMT5	SMT6	SMT7	SMT8	SMT9	SMT10	SMT11	SMT12
SMT1	1.000	.824	.789	.760	.604	.706	.662	.665	.721	.706	.706	.697
SMT2	.824	1.000	.819	.797	.645	.751	.696	.714	.742	.707	.727	.737
SMT3	.789	.819	1.000	.811	.631	.786	.684	.679	.743	.728	.751	.761
SMT4	.760	.797	.811	1.000	.646	.737	.705	.711	.715	.694	.708	.750
SMT5	.604	.645	.631	.646	1.000	.643	.646	.632	.612	.624	.598	.596
SMT6	.706	.751	.786	.737	.643	1.000	.724	.692	.758	.702	.733	.707
SMT7	.662	.696	.684	.705	.646	.724	1.000	.719	.702	.687	.679	.717
SMT8	.665	.714	.679	.711	.632	.692	.719	1.000	.634	.692	.664	.672
SMT9	.721	.742	.743	.715	.612	.758	.702	.634	1.000	.825	.870	.819
SMT10	.706	.707	.728	.694	.624	.702	.687	.692	.825	1.000	.819	.832
SMT11	.706	.727	.751	.708	.598	.733	.679	.664	.870	.819	1.000	.845
SMT12	.697	.737	.761	.750	.596	.707	.717	.672	.819	.832	.845	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SMT1	59.95	155.371	.826	.739	.965
SMT2	59.81	155.689	.864	.793	.964
SMT3	59.83	153.310	.866	.793	.964
SMT4	59.79	154.801	.849	.756	.964
SMT5	60.08	156.570	.717	.539	.968
SMT6	60.01	155.007	.838	.729	.965
SMT7	59.76	158.017	.802	.673	.966
SMT8	60.07	157.361	.784	.662	.966
SMT9	59.97	153.133	.863	.825	.964
SMT10	59.95	153.892	.849	.784	.964
SMT11	59.97	152.732	.858	.822	.964
SMT12	59.81	153.689	.862	.808	.964

Inter-Item Correlation Matrix

	SMC1	SMC3	SMC4	SMC5	SMC6	SMC7	SMC8	SMC9	SMC10	SMC11	SMC12
SMC1	1.000	.395	.489	.480	.478	.423	.404	.423	.443	.414	.435
SMC3	.395	1.000	.742	.733	.690	.546	.587	.623	.549	.542	.554
SMC4	.489	.742	1.000	.753	.747	.671	.684	.754	.661	.691	.740
SMC5	.480	.733	.753	1.000	.852	.592	.642	.688	.597	.683	.626
SMC6	.478	.690	.747	.852	1.000	.527	.629	.628	.573	.660	.603
SMC7	.423	.546	.671	.592	.527	1.000	.825	.787	.755	.697	.736
SMC8	.404	.587	.684	.642	.629	.825	1.000	.821	.829	.770	.781
SMC9	.423	.623	.754	.688	.628	.787	.821	1.000	.798	.780	.780
SMC10	.443	.549	.661	.597	.573	.755	.829	.798	1.000	.726	.730
SMC11	.414	.542	.691	.683	.660	.697	.770	.780	.726	1.000	.879
SMC12	.435	.554	.740	.626	.603	.736	.781	.780	.730	.879	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SMC1	51.17	101.493	.514	.305	.958
SMC3	51.06	96.933	.715	.633	.951
SMC4	50.90	94.376	.844	.771	.947
SMC5	51.11	94.241	.805	.794	.948
SMC6	51.10	95.475	.771	.774	.949
SMC7	50.91	95.604	.796	.740	.949
SMC8	50.87	93.026	.851	.822	.947
SMC9	50.94	92.532	.865	.797	.946
SMC10	50.99	94.077	.809	.742	.948
SMC11	50.94	93.750	.834	.824	.947
SMC12	50.98	93.331	.836	.831	.947

Inter-Item Correlation Matrix

	DMC1	DMC2	DMC3	DMC4
DMC1	1.000	.754	.691	.683
DMC2	.754	1.000	.750	.696
DMC3	.691	.750	1.000	.807
DMC4	.683	.696	.807	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
DMC1	15.85	10.887	.777	.622	.900
DMC2	15.83	10.929	.811	.673	.888
DMC3	15.78	11.034	.834	.724	.880
DMC4	16.02	10.711	.803	.685	.891

Inter-Item Correlation Matrix

	AMC1	AMC2	AMC3	AMC4	AMC5	AMC6	AMC7	AMC8	AMC10	AMC11	AMC12
AMC1	1.000	.681	.662	.542	.548	.573	.616	.551	.705	.673	.656
AMC2	.681	1.000	.638	.638	.617	.628	.606	.558	.584	.552	.637
AMC3	.662	.638	1.000	.721	.663	.638	.667	.596	.612	.611	.650
AMC4	.542	.638	.721	1.000	.635	.721	.609	.621	.603	.563	.626
AMC5	.548	.617	.663	.635	1.000	.655	.669	.543	.503	.562	.593
AMC6	.573	.628	.638	.721	.655	1.000	.735	.550	.555	.565	.556
AMC7	.616	.606	.667	.609	.669	.735	1.000	.643	.650	.692	.693
AMC8	.551	.558	.596	.621	.543	.550	.643	1.000	.646	.600	.618
AMC10	.705	.584	.612	.603	.503	.555	.650	.646	1.000	.792	.796
AMC11	.673	.552	.611	.563	.562	.565	.692	.600	.792	1.000	.834
AMC12	.656	.637	.650	.626	.593	.556	.693	.618	.796	.834	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
AMC1	53.43	93.542	.759	.655	.945
AMC2	53.57	90.036	.748	.619	.945
AMC3	53.43	89.994	.792	.669	.943
AMC4	53.55	90.672	.770	.692	.944
AMC5	53.58	91.668	.731	.592	.945
AMC6	53.67	91.138	.757	.688	.945
AMC7	53.49	89.083	.809	.712	.943
AMC8	53.48	90.744	.722	.551	.946
AMC10	53.46	90.771	.789	.744	.943
AMC11	53.32	90.290	.788	.765	.943
AMC12	53.34	90.354	.819	.784	.942

Inter-Item Correlation Matrix

	ET1	ET2	ET3	ET4
ET1	1.000	.584	.643	.575
ET2	.584	1.000	.826	.417
ET3	.643	.826	1.000	.468
ET4	.575	.417	.468	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ET1	15.26	12.855	.707	.515	.806
ET2	15.66	12.774	.739	.687	.792
ET3	15.52	11.631	.790	.725	.768
ET4	15.31	15.555	.547	.347	.867

Inter-Item Correlation Matrix

	MP1	MP2	MP3	MP4
MP1	1.000	.817	.567	.724
MP2	.817	1.000	.631	.779
MP3	.567	.631	1.000	.757
MP4	.724	.779	.757	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
MP1	15.60	10.354	.779	.688	.887
MP2	15.57	9.839	.835	.744	.866
MP3	15.50	10.660	.709	.577	.911
MP4	15.64	9.597	.852	.736	.860

APPENDIX 5.6 CONSTRUCTS' UNIDIMENSIONALITY

Firm cultural intelligence

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.721	69.433	69.433	9.721	69.433	69.433
2	.858	6.126	75.559			
3	.656	4.689	80.248			
4	.478	3.417	83.666			
5	.403	2.878	86.543			
6	.372	2.659	89.202			
7	.345	2.466	91.668			
8	.297	2.124	93.792			
9	.221	1.579	95.372			
10	.186	1.331	96.702			
11	.146	1.041	97.744			
12	.135	.964	98.708			
13	.104	.745	99.453			
14	.077	.547	100.000			

Extraction Method: Principal Component Analysis.

Social media technologies

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.892	74.099	74.099	8.892	74.099	74.099
2	.615	5.121	79.220			
3	.495	4.128	83.348			
4	.382	3.181	86.529			
5	.318	2.646	89.175			
6	.269	2.244	91.419			
7	.258	2.149	93.568			
8	.188	1.566	95.134			
9	.175	1.457	96.591			
10	.158	1.314	97.905			
11	.141	1.175	99.080			
12	.110	.920	100.000			

Extraction Method: Principal Component Analysis.

Static marketing capabilities

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.559	68.718	68.718	7.559	68.718	68.718
2	.970	8.820	77.539			
3	.687	6.249	83.788			
4	.437	3.971	87.759			
5	.330	2.997	90.755			
6	.247	2.246	93.002			
7	.222	2.015	95.017			
8	.189	1.720	96.737			
9	.148	1.344	98.081			
10	.116	1.053	99.134			
11	.095	.866	100.000			

Extraction Method: Principal Component Analysis.

Dynamic marketing capabilities

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.191	79.783	79.783	3.191	79.783	79.783
2	.377	9.427	89.210			
3	.252	6.304	95.514			
4	.179	4.486	100.000			

Extraction Method: Principal Component Analysis.

Adaptive marketing capabilities

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.308	66.435	66.435	7.308	66.435	66.435
2	.834	7.585	74.020			
3	.524	4.766	78.786			
4	.464	4.217	83.003			
5	.395	3.589	86.592			
6	.382	3.476	90.069			
7	.341	3.101	93.169			
8	.261	2.374	95.544			
9	.186	1.688	97.232			
10	.166	1.507	98.739			
11	.139	1.261	100.000			

Extraction Method: Principal Component Analysis.

Environmental turbulence

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.772	69.290	69.290	2.772	69.290	69.290
2	.688	17.194	86.484			
3	.372	9.295	95.779			
4	.169	4.221	100.000			

Extraction Method: Principal Component Analysis.

Firm performance

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.142	78.557	78.557	3.142	78.557	78.557
2	.488	12.210	90.767			
3	.199	4.970	95.737			
4	.171	4.263	100.000			

Extraction Method: Principal Component Analysis.

APPENDIX 5.7 COMMUNALITIES

Communalities

	Initial	Extraction
FCI1	1.000	.772
FCI2	1.000	.691
FCI3	1.000	.480
FCI4	1.000	.767
FCI5	1.000	.702
FCI6	1.000	.774
FCI7	1.000	.800
FCI8	1.000	.743
FCI9	1.000	.652
FCI10	1.000	.811
FCI11	1.000	.759
FCI12	1.000	.860
FCI13	1.000	.789
FCI14	1.000	.717
SMT1	1.000	.745
SMT2	1.000	.795
SMT3	1.000	.824
SMT4	1.000	.803
SMT5	1.000	.621
SMT6	1.000	.775
SMT7	1.000	.704
SMT8	1.000	.718
SMT9	1.000	.813
SMT10	1.000	.764
SMT11	1.000	.821
SMT12	1.000	.795
SMC1	1.000	.495
SMC3	1.000	.639
SMC4	1.000	.789
SMC5	1.000	.747
SMC6	1.000	.759
SMC7	1.000	.775
SMC8	1.000	.818
SMC9	1.000	.817
SMC10	1.000	.751
SMC11	1.000	.769
SMC12	1.000	.782
DMC1	1.000	.772
DMC2	1.000	.787
DMC3	1.000	.830
DMC4	1.000	.793
AMC1	1.000	.666
AMC2	1.000	.699
AMC3	1.000	.760
AMC4	1.000	.707
AMC5	1.000	.657
AMC6	1.000	.702
AMC7	1.000	.753
AMC8	1.000	.626
AMC10	1.000	.723
AMC11	1.000	.720
AMC12	1.000	.757
ET1	1.000	.702
ET2	1.000	.753
ET3	1.000	.828
ET4	1.000	.565
MP1	1.000	.846
MP2	1.000	.861
MP3	1.000	.709
MP4	1.000	.845

Extraction Method: Principal Component Analysis.