# Investigating the Antecedents and Outcomes of B2B Firms' Social CRM Capabilities in an Emerging Market

## Ilke Cicekli

## **Bournemouth University Business School**



Submitted in Fulfilment of the Requirements for Doctor of Philosophy Degree (PhD) at Bournemouth University

December 2023

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#### ABSTRACT

This study investigates the how entrepreneurial orientation contribute to a firm-level capability of social customer relationship management (CRM) in the context of business-to-business (B2B) firms in emerging markets. With the rising utilisation of social media, B2B firms are recognising the need to adapt their CRM strategies and develop new marketing capabilities that can enhance firm performance. Notably, 96% of managers expect to integrate social data into their firm's CRM within the next the three years. However, despite the increased attention from both researchers and practitioners, social CRM is still a new phenomenon which remains underexplored. Social CRM is a strategy that integrates social media with CRM systems to manage and enhance customer relationships. Previous studies built on the resource-based view (RBV) and dynamic capabilities theories to examine the social CRM capabilities. These studies suggested that social CRM capability is critical when firms merge social media into their marketing strategy to gain the performance benefits. However, prior literature ignored the entrepreneurial aspects in the context of social CRM and in uncertain environments. Therefore, this study considers entrepreneurial orientation as a driver of social CRM capabilities and examines these relationships under the effectual logic. Drawing from the resource-based view (RBV), dynamic capabilities and effectuation theory, this study specifically examines the influence of all the dimensions of entrepreneurial orientation - innovativeness, proactiveness, risk-taking, autonomy and aggressiveness- on social CRM capabilities. This study also investigates the moderating role of customer-centric management systems on the entrepreneurial orientation and social CRM capabilities relationship. Additionally, firm performance is examined as an outcome of social CRM capabilities. A conceptual model outlining these relationships is developed and presented. Using a sample of 217 B2B firms in an emerging market, Turkey, the conceptual model is analysed using structural equation modeling. The data is analysed utilising LISREL 9.3 software, including descriptive analysis, exploratory factor analysis and confirmatory factor analysis. The findings reveal that autonomy, aggressiveness, and risk-taking are positively related to social CRM capabilities, while innovativeness and proactiveness are insignificant in the context of uncertain environments. Additionally, findings show that customer-centric management systems positively moderate the relationship between all of the entrepreneurial orientation dimensions and social CRM capabilities which suggests that entrepreneurs need to appropriately use resources to develop social CRM capabilities. It is also found that social CRM capabilities positively influence firm performance. The study controlled for technology resources, firm size, and experience with social media. Results indicated that technology resources positively impact firm performance but negatively affect social CRM capabilities. Firm size positively influences firm performance but has no significant effect on social CRM capabilities. Experience showed no significant relationship with either social CRM capabilities or firm performance. This study contributes to both theory and practice. The first key contribution is that this is the first study to investigate the relationship between entrepreneurial orientation and social CRM capabilities. Also, within this context, this study builds on effectuation theory to examine the influence of entrepreneur's decision-making logics particularly in uncertain environments, which is also the first study to adapt effectuation theory in the context of social CRM. In addition, this study further investigates the social CRM capabilities and firm performance relationship focussing only on the B2B firms in emerging markets. Finally, this doctoral thesis provides novel insights to B2B firms on how to develop stronger social CRM capabilities to enhance their firm performance from the entrepreneurial perspective. The thesis concludes with a discussion on limitations and suggestions for areas of future research.

Key words: social CRM capabilities; entrepreneurial orientation; resource-based view; dynamic capabilities; effectuation theory; firm performance, B2B firms, emerging markets

#### **ACKNOWLEDGMENTS**

First and foremost, I would like to acknowledge my supervisors, an immense thank you to my three supervisors: Dr Kaouther Kooli, Dr Osikhuemhe Okwilagwe and Dr Ediz Akcay. Your support and guidance throughout this PhD journey from you all have been invaluable. Thank you for your contribution in the development of myself in all areas of my life, and for your invaluable advice that will benefit me throughout my life. Kaouther, in particular you have been an amazing primary supervisor. I cannot thank you enough for your continuous support, always believing in me, and most importantly for always being there by answering the phone and calming me down even if it was 7am in the morning or 10pm at night. Your expertise, mentorship, encouragement, and belief in my abilities have been a constant source of motivation and achievement of this thesis.

To my mum and dad, from the bottom of my heart I would like to say a big thank you for always encouraging and supporting me throughout my entire life. Your love, sacrifices, and unending support have been the key to this accomplishment, in which would not be possible without you. Dad, thank you for your endless support both emotionally and financially. I am and will always be grateful to you. Also, thank you for teaching me that I should always be happy in life no matter what. Mum, your unwavering support, and love have been a guiding light, providing strength and inspiration. You are always there whenever I need you, and I know you always will be. I would not be the person I am now without your guidance throughout my life. Anne, sana ne kadar tesekkur etsem az, seni cok seviyorum. Lastly, to my brother, I know you always make fun of me (jokingly), but I also know you always support me without a doubt. You have always been there for me, you always support me, and this thesis would not be possible without your jokes and love. Thank you for being the best brother and thank you for always helping me with whatever I need. To my family, this accomplishment is as much yours as it is mine; I owe you an immeasurable debt of gratitude.

I would like to further express my gratitude to my partner, Dayle. I know these few months have been difficult, and I know I have been annoying sometimes. I cannot thank you enough for supporting me during these challenging times both academically and emotionally. You made me a better researcher, and most importantly a better person. Your continuous guidance, support, and love have kept me going. You are a big contributor to the achievement of this thesis and now, I cannot wait for publishing papers together. Thank you for sharing your knowledge and always keeping me positive.

To all of my friends, you have always provided the support and laughs when I needed the most, which will be forever appreciated. Hande, I cannot thank you enough but thank you for being the shoulder to cry on, and for all the venting chats we have had. I appreciate you, and our friendship very much.

Finally, a special thanks to Professor John Cadogan, your valuable insights and expertise in the field of marketing and analysis have immensely contributed to this thesis.

To everyone mentioned above, and countless others, thank you for all of your support. This thesis would not have been possible without your guidance and encouragement. Thank you from the bottom of my heart.

## **Table of Contents**

4	BSTRACT	4	
4	ACKNOWLEDGMENTS5		
C	CHAPTER 1: INTRODUCTION12		
	1.1 Chapter Introduction	12	
	1.2 Background of the Study	12	
	1.3 Background of the Literature	14	
	1.4 Theoretical Lenses	15	
	1.5 Gaps in the Literature	17	
	1.6 Context of This Study	20	
	1.7 Research Objectives	22	
	1.8 Contributions to the Theory and Practice	22	
	1.9 Outline of the Thesis	24	
	1.10 Chapter Summary	26	
С	HAPTER 2: LITERATURE REVIEW	27	
	2.1 Chapter Introduction	27	
	2.2 Social Customer Relationship Management (CRM)	30	
	2.3 Social CRM Capabilities	32	
	2.4 Resource-based View (RBV) Theory	33	
	2.5 Dynamic Capabilities	36	
	2.6 Effectuation Theory	38	
	2.7 Entrepreneurial Orientation	41	
	2.8 Firm Performance as an Outcome	44	
	2.9 Chapter summary	46	
С	HAPTER 3: CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT	47	
	3.1 Chapter Introduction	47	
	3.2 Antecedents of Social CRM Capabilities	49	
	3.2.1 Innovativeness and Social CRM Capabilities	50	
	3.2.2 Risk-taking and Social CRM Capabilities	52	
	3.2.3 Proactiveness and Social CRM Capabilities	53	
	3.2.4 Aggressiveness and Social CRM Capabilities	54	
	3.2.5 Autonomy and Social CRM Capabilities	55	
	3.3 Customer-Centric Management Systems and Social CRM Capabilities	56	

	3.4 The Moderating Role of Customer-Centric Management Systems on the entrepreneurial orientation/social CRM capabilities Relationship	58
	3.4.1 Innovativeness, Customer-centric Management Systems and Social CRM Capabilities	60
	3.4.2 Risk-taking, Customer-centric Management Systems and Social CRM Capabilities	
	3.4.3 Proactiveness, Customer-centric Management Systems and Social CRM Capabilities	62
	3.4.4 Aggressiveness, Customer-centric Management Systems and Social CRM Capabilities.	63
	3.4.5 Autonomy, Customer-centric Management Systems and Social CRM Capabilities	63
	3.5 Firm Performance as an Outcome	64
	3.6 Chapter Summary	65
C	CHAPTER 4: RESEARCH METHODOLOGY	67
	4.1 Chapter Introduction	67
	4.2 Research Assumptions	67
	4.3 Research Philosophy	68
	4.4 Research Approach	69
	4.5 Methodological Choices	70
	4.5.1 Research Design	70
	4.5.2 Survey research method	71
	4.5.3 Cross-Sectional Data versus Longitudinal Data	72
	4.6 Sampling	
	4.6.1 Sample Size	74
	4.6.2 Exclusion criteria	75
	4.7 Method of administration (third party company)	75
	4.8 Questionnaire Design	78
	4.8.1 Operationalisation of Constructs	78
	4.8.2 Physical Questionnaire Design	87
	4.9 Ethical Considerations	94
	4.10 Chapter Summary	95
C	CHAPTER 5: DESCRIPTIVE ANALYSIS	96
	5.1 Chapter Introduction	96
	5.2 Sample Descriptive	96
	5.3 Respondent's role in the firm	97
	5.4 Respondent's experience in current role	97
	5.5 Firm age	
		00

	5.7 Industry	99
	5.8 Annual Turnover	99
	5.9 Social media use of the firm (experience in years)	. 100
	5.10 Summary of Sample Appropriateness	. 100
	5.11 Analysing Existing Multi-Item Measures	. 101
	5.12 Unidimensionality and Validity	. 102
	5.13 Exploratory Factor Analysis Procedure and Internal Consistency	. 103
	5.14 Confirmatory Factor Analysis Procedure	. 106
	5.15 Individual Scale Results Using EFA	. 108
	5.15.1 Entrepreneurial Orientation	. 108
	5.15.2 Social CRM Capabilities	. 110
	5.15.3 Customer-centric Management Systems	. 111
	5.15.4 Firm Performance	. 111
	5.16 Group Analysis Using CFA	. 112
	5.16.1 Group 1: Entrepreneurial Orientation	. 113
	5.16.2 Group 2: Core Variables and Control Variables	. 115
	5.17 Discriminant Validity Analysis	. 118
	5.18 Descriptive Statistics	. 119
	5.18.1 Social CRM Capabilities	. 119
	5.18.2 Firm Performance	.120
	5.18.3 Entrepreneurial Orientation	.121
	5.18.4 Customer-centric Management Systems	. 124
	5.18.5 Technology Resources	. 125
	5.19 Chapter Summary	. 125
C	CHAPTER 6: ANALYSIS	.127
	6.1 Chapter Introduction	. 127
	6.2 Analysis Strategy Considerations	. 127
	6.3 Moderation	. 129
	6.4 Missing Data	. 130
	6.5 General Assumptions of the Data	. 130
	6.6 Maximum Likelihood vs Restricted Estimation Maximum Likelihood	. 131
	6.7 Model Specification	. 132
	6.8 Hypotheses Testing	. 132
	6.9 Addressing Common Method Ries	136

6.10 Chapter Summary	142
CHAPTER 7: DISCUSSION AND CONCLUSION	
7.1 Chapter Introduction	143
7.2 Discussion on Empirical Framework	143
7.3 Discussion on the Hypothesised Results	147
7.4 Discussion of Control Paths	154
7.5 Overall Discussion of Results	156
7.6 Theoretical Contributions	159
7.7 Practical Contributions	161
7.8 Limitations and Future Research Areas	163
7.9 Chapter Summary	164
REFERENCES	
Appendix 1	
Appendix 2	

## **List of Figures**

Figure 1 Proposed Conceptual Model	48
Figure 2 Social CRM Capabilities	119
Figure 3 Firm Performance	120
Figure 4 Innovativeness	121
Figure 5 Autonomy	122
Figure 6 Aggressiveness	122
Figure 7 Proactiveness	123
Figure 8 Risk-Taking	124
Figure 9 Customer-centric Management Systems	124
Figure 10 Technology Resources.	125
Figure 11 Empirical Framework	146
List of Tables	
Table 1 Measure of social CRM capabilities	79
Table 2 Measure of social CRM capabilities	80
Table 3 Measure of social CRM capabilities	80
Table 4 Measure of innovativeness	81
Table 5 Measure of risk-taking	
Table 6 Measure of proactiveness	82
Table 7 Measure of aggressiveness	83
Table 8 Measure of autonomy	83
Table 9 Measure of customer-centric management systems	
Table 10 Measure of firm performance	85
Table 11 Respondent's role	
Table 12 Respondent's experience in the current firm	
Table 13 Firm age	
Table 14 Firm size	98
Table 15 Industry	
Table 16 Annual turnover	
Table 17 Social media experience within the firm	
Table 18 Innovativeness Scale	
Table 19 Risk-Taking Scale	
Table 20 Proactiveness Scale	109
Table 21 Aggressiveness Scale	
Table 22 Autonomy Scale	
Table 23 Social CRM Capabilities Scale	
Table 24 Customer-centric Management Systems Scale	
Table 25 Firm Performance Scale	
Table 26 Sub-sets for the CFA analyses	113

Table 27 Group 1 CFA Results	114
Table 28 Group 2 CFA Results	116
Table 29 Squared Pearson Correlation Coefficients and AVEs	118
Table 30 Results of Hypotheses	133
Table 31 Hypotheses Significance	136
Table 32 Original Correlation Matrix	139
Table 33 Adjusted Correlation Matrix	140
Table 34 Second Adjusted Correlation Matrix	141
Table 35 Empirical Results of Hypothesised Relationships	147

#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Chapter Introduction

The first chapter of this PhD thesis delves into its background, structured as follows. It begins with an introduction and discussion of the main issue of the research. This discussion leads to an exploration of the theoretical underpinnings. Subsequently, a comprehensive and critical review of the foundational literature is provided, which leads to the identification of the specific research problem, along with the presentation of research objectives. The chapter wraps up with a detailed outline of the thesis's overall structure.

#### 1.2 Background of the Study

Customer relationship management (CRM) has transitioned from being a tactical tool, where firms use customer data to manage relationships, to adopting a more strategic role (Perez-Vega et al. 2022). This strategic approach positions CRM as a key business process, aimed at creating and sustaining a network of stakeholder relationships (Boulding et al. 2005). This shift has enhanced firm competitiveness and performance in various ways, such as lowering service costs, involving customers in innovation processes, and development of dynamic capabilities (Harrigan et al. 2020; Cheng and Shiu 2019; Woodcock et al. 2011). However, with the rise in social media, communication models have experienced significant evolution to include manyto-many interactions (Dahl 2018). As a result, the traditional views of CRM, which has its foundations in operational and transactional approaches, face with certain limitations in the dynamic and interactive environments where customer interactions take place (Greenberg 2010a). As a result, firms started to integrate social media tools into their CRM systems. This integration aims to capture social interactions, analyse customer attitudes, and engage with customers directly on social media platforms, which has led to shaping the concept of social CRM. Social CRM stands as the most strategically mature social media marketing approach (Li et a. 2021). It has been defined as "a philosophy and a business strategy, supported by a system and a technology, designed to engage the customer in a collaborative interaction that

provides mutually beneficial value in a trusted and transparent business environment" (Greenberg 2010, p.414). This definition builds upon traditional CRM fundamentals, however, extends them to incorporate social aspects of firm's behaviour and traits, as well as the interactions between firms and customers facilitated by emerging technologies (Guha et al. 2018). For example, Salesforce uses Facebook and X (Twitter) to share information and interact with customers. Although the company is in the B2B context, they post both informative and humorous content to humanise the company. By leveraging social CRM, they utilise real-time data to respond to customer inquiries and complaints, which allows them to build and maintain customer relationships.

Furthermore, the landscape of business-to-business (B2B) firms has radically transformed in recent years due to the meteoric rise of technology and social media. In the modern age, 95% of B2B firms are using social media to reach and connect with their customers (CMI 2020). B2B customers are increasingly using social media to search for information regarding products and firms, to help aid them in their purchase decisions. In addition, social media is increasingly being used as the point of contact for brands to engage with their customers. For firms, a key use of social media is for CRM purposes. Social CRM is a critical strategy employed in firms, since the strategy has the capability to provide valuable customer insight, enhance customer engagement and retention (Trainor et al. 2014), and aid firms in establishing thought leadership. Firms have started to implement social media into their CRM strategies, with 96% of managers expect to integrate social data into their firm's CRM within the next the three years (Sprout Social 2023).

This rise in social media has necessitated the development of new CRM capabilities by firms, moving beyond traditional strategies and formats (Pansari and Kumar 2017; Wang and Kim 2017; Trainor et al. 2014; Rapp et al. 2013). This involves integrating social media into existing CRM systems, enabling firms to develop enhanced customer satisfaction and effectively utilise these interactive platforms for customer relationship management (Trainor et al. 2014). Thus, the term social CRM capabilities have emerged, and defined as "the integration of traditional customer-facing activities, including processes, systems, and technologies with emergent social media applications to engage customers in collaborative conversations and enhance customer relationship" (Trainor 2012, p. 321). This definition was further extended to "a unique combination of emerging technological resources and customer-centric management

systems that can lead to customer satisfaction, loyalty, and retention" (Trainor et al. 2014, p. 1202), focusing on the importance of customer-centric management systems, and the outcome of customer relationship performance. In this context, customer-centric management systems refer to how extensively firms adapt their business processes and systems to prioritise customer needs (Jayachandran et al. 2005).

#### 1.3 Background of the Literature

In light of this increased practitioner focus on social CRM, academic literature has begun to examine social CRM within firms. The foundational research in this field, initially introduced by Greenberg (2010a), referred to the concept as CRM 2.0. Following this, later research (Greenberg 2010b), shifted to using the term social CRM. Building on the author's work, several studies examined the adoption, drivers, and outcomes of social CRM. For instance, to elucidate the determinants of social CRM adoption, some researchers integrated their models with established frameworks, such as the Technology Acceptance Model (TAM) (Askool and Nakata 2011), and the dynamic capabilities theory (Harrigan and Miles 2014). These studies explored both customer-related and organisational factors influencing the adoption of social CRM (Askool and Nakata 2011), and focussing on SMEs from the dynamic capability's perspective Harrigan and Miles (2014) broke down social CRM in SMEs into seven distinct aspects, which are online communities, social media support, information capture, information use, customer relationship orientation, social media data and customer communication, concluding that SME owners or managers should strategically combine social media use and CRM activities.

Moreover, the acknowledged potential of social CRM technologies i.e. social media tools, social media monitoring tools, social analytic tools is broadly recognised; however, just having access to these technologies is not a guarantee of social CRM success, in which it is essential for firms to also develop the capability to effectively utilise data obtained from social media technologies (Foltean et al. 2019; Wang and Kim 2017; Trainor et al. 2014). Trainor et al. (2014) highlighted the influence of interaction between social media technologies and customer-centric management systems result in enhances social CRM capabilities and increases customer relationship performance. This research reveals that for the most effective

use, social media technologies should be combined with effective systems for customer relationship management, emphasising the complementary nature of these resources. The conceptualisation of social media technologies as facilitators of relationships, needing additional customer management capabilities and a foundational relational orientation, is further supported by Choudhury and Harrigan (2014). In a similar vein, Cheng and Shiu (2019) emphasised in their research focusing on the influence of social media-based customer involvement research, that success relies on the combination of two main capabilities, which are the ability to establish and develop networks via social media, and the ability in processing and examining the gathered information. Extending upon the findings of Wang et al. (2013) and Guha et al. (2018), it is suggested that the long-term cultivation of these capabilities can lead to the development of dynamic capabilities, thus enhancing overall firm performance. Lastly, building on this work, Harrigan et al. (2020) further elaborate, conceptualising social CRM as a 'second-order dynamic capability', which includes technology capabilities, customer engagement initiatives, social information processes, acting as a mediator in the relationship between technology as an input and performance as an output. Although there is initial evidence linking social CRM capabilities to firm performance (e.g., Kim and Wang 2019; Bhatti et al. 2019; Ahani et al. 2017), there is further need to understand the link between social CRM capabilities and firm performance (Perez-Vega et al. 2022).

#### 1.4 Theoretical Lenses

Prior research on social CRM has mainly built on the dynamic capabilities and resource-based view (RBV) theories. Dynamic capability theory suggests that organisational competitive environments are characterised by dynamism, and that firms possess different capabilities for acquiring and utilising resources (Teece et al. 1997). Consequently, these different capabilities lead to variations in performance over time (Eisenhardt and Martin 2000). The theory also recognises the evolving nature of these capabilities, highlighting that firms can employ diverse strategies to adjust to environmental changes. This adaptation is facilitated via the innovative combination and transformation of available resources (Morgan et al. 2009). In the context of social CRM, dynamic capabilities have been applied to examine how the development of capabilities for generating, integrating, and reacting to information derived from customer

interactions on social media influences levels of customer engagement, and consequently firm performance (Wang and Kim 2017). Dynamic capabilities theory originates from the RBV of firms, positing that a firm's ability in leveraging internal resources to distinguish itself from competitors and achieving enhanced performance (Teece 2018).

Moreover, the resource-based view theory explains the manner in which firms utilise resources to sustain and enhance their competitive edge (Rapp et al. 2010). This perspective posits that resources, characterised by their value and inimitability, comprise assets, knowledge, and processes that allow firms to employ strategies to increase efficiency (Barney 1991). Previous studies mostly combined both the dynamic capabilities and the RBV theories to examine how social CRM can be utilised for competitive advantage and firm performance (e.g., Harrigan et al. 2020; Bhatti et al. 2019; Wang and Kim 2017; Choudhury and Harrigan 2014; Trainor et al. 2014; Rapp et al. 2010).

In addition, a study (Chatterjee et al. 2021) explored various determinants of social CRM, based on the technology, organisation, and environment (TOE) theory, that influence the actual implementation of social CRM in firms, along with their effects on firm advantages. TOE theory focusses on examining firm's context and its influence on the implementation of innovations (Baker 2012), which considers both the technological and organisational context as well as the external environment of the firm. The results of their research indicate that factors such technological competence, environmental characteristic's, leadership support, and the firm's environment influence the utilisation of social CRM. Another study (Al-Omoush et al. 2021) building on the TOE framework, have identified the impact of organisational and technological contexts on social CRM entrepreneurship. They have also highlighted the influence of the institutional pressures (normative and coercive) on social CRM entrepreneurship. Although, the TOE framework considers the influence of various contexts, including the environmental context (Al-Omoush et al. 2021), this framework is limited as it does not consider the entrepreneurs decision-making logic particularly in unstable environments.

Building on these discussions, this study draws from the RBV, dynamic capabilities and the effectuation theory. Effectuation theory is a concept rooted in entrepreneurship studies that offers a unique perspective on entrepreneurial decision-making in uncertain and unpredictable environments. This theory provides a framework that contrasts with traditional, predictive, or

causal reasoning methods, offering insights into the unique processes and decision-making logics of entrepreneurs (Sarasvathy 2001). Effectuation posits that in uncertain and dynamic environments, the future is not planned in prior but rather created through entrepreneurial actions (Cowden et al. 2022; Welter and Kim 2018). This approach enables firms to adapt to unpredictable circumstances and explore new opportunities and possibilities without precommitment. The dynamic capabilities and the RBV theories are recognised frameworks that emphasises the significance of a firm's resource management, competitive advantage, and firm performance. To examine the relationship between resources, and capabilities, and its outcome of the firm performance, these theories have been utilised in this study. However, both the dynamic capabilities and RBV theories have certain limitations, where the effectuation theory can provide support and offer complementary insights. For example, both of these theories predominantly focus on utilising existing resources to achieve a competitive advantage and improve firm performance. Nonetheless, these theories are less equipped to address the significant levels of uncertainty and unpredictability in entrepreneurial and rapidly changing environments. The context of this study focuses on an emerging market, Turkey, where the market is unstable and unpredictable (section 1.6). Effectuation posits that in contexts characterised by uncertainty and unpredictability, entrepreneurs tend to employ an effectual logic in their decision-making process (Laskovaia et al. 2019). Therefore, to examine relationship between entrepreneurial orientation, and social CRM capabilities, this study also builds on the effectuation theory as well as the RBV and dynamic capabilities theories.

#### 1.5 Gaps in the Literature

As discussed above, most social CRM literature built on the RBV and dynamic capabilities theories (i.e., Harrigan et al. 2020; Bhatti et al. 2019; Wang and Kim 2017; Choudhury and Harrigan; 2014; Trainor et al. 2014, with the focus of examining firm's internal resources, and their impact on social CRM. Although these studies have examined some antecedents to social CRM such as social media technology use, customer-centric management systems, the current literature ignored the entrepreneurs' decision-making logics, which is crucial to understand particularly in the B2B context and in rapidly changing environmental conditions. This current study is yet to first study to examine the relationship between entrepreneurial orientation and

social CRM capabilities. It is evident that firm's resources, and how firms utilise social media is significant to develop social CRM capabilities. However, it is also important to understand the role of firm's strategy-making in developing social CRM capabilities. Researchers have highlighted the significant potential of social media as a beneficial and productive ground for research in entrepreneurship (Fraccastroro and Gabrielsson 2018; Gustaffson and Khan 2017). Studies concluded that social media usage by firms presents substantial opportunities for gaining detailed insights into customer needs, preferences, and expectations, which provides firms with new entrepreneurial ventures (e.g., Yong and Hassan 2019; Latuny 2018; Crommond et al. 2018). Although there is increasing interest in the adoption of social media by firms, there remains a limited understanding on how entrepreneurship can be integrated into social CRM (Al-Omoush et al. 2021). Building on this research gap, the current study empirically examines the role of entrepreneurial orientation on social CRM capabilities.

From the theoretical perspective, prior social CRM literature did not consider effectuation theory. Effectuation theory presents a decision-making framework used by entrepreneurs in uncertain environments (Sarasvathy 2001). It focuses on leveraging available resources to create opportunities, emphasising adaptability and flexibility. Entrepreneurial orientation reflects firms' organisational strategy (Lumpkin and Dess). Firms that are equipped with entrepreneurial orientation and effectual logic, are expected to adopt, and experiment with new technologies, and develop stronger social CRM capabilities. Thus, this study is the first to draw from effectuation theory in the context of social CRM. By building on the effectuation theory, this study aims to bridge the gap between resources, effectuation, and capabilities.

Furthermore, although social CRM has gained growing interest in both from academics and practitioners, it remains a relatively nascent and under-researched phenomenon (Yasiukovich and Haddara 2021). Consequently, there is a significant knowledge gap regarding the social CRM capabilities (Kim and Wang 2019). This study also investigates the relationship between social CRM capabilities and firm performance. In line with the dynamic capability's theory, literature highlights that marketing capabilities (Morgan et al. 2009), and CRM capabilities (Foltean et al. 2019; Srinivasan and Moorman 2005) lead to firm performance. Although there is initial evidence linking social CRM capabilities to firm performance (e.g., Kim and Wang 2019; Bhatti et al. 2019; Ahani et al. 2017), further studies are needed to understand social CRM and performance relationship (Perez-Vega et al. 2022). Thus, this study examines this

relationship purely focussing on the B2B firms in an emerging market. This is because emerging markets have different characteristics than developed countries in terms of their market heterogeneity, high influence of sociopolitical institutions, higher levels of competition, lower levels of resources, and insufficient infrastructure (Sheth 2011). Considering these differences, the influence of social CRM capabilities on firm performance may differ in emerging markets in comparison to developed countries.

Moreover, social media has emerged as a critical tool in B2B marketing (Kumar and Sharma 2022). Social media is a key strategy for marketers, with its use of 83% in B2B firms (Pulizzi and Handley 2017). In the context of B2C marketing, social media's significance is wellestablished, and its growing importance in B2B markets (Kumar and Sharma 2022; Cartwright et al. 2021). This is because social media allows B2B firms to have an effective interaction with their customers (Keinänen and Kuivalainen 2015), which helps firms to instantly act, and generate and disseminate information, and respond to customers. Additionally, social media also have the potential to establish capabilities which could turn into effective resources resulting in higher performance and competitive advantages (Siamagka et al. 2015). Although B2B firms have started to utilise social media for their benefit, the research in this area is still in its nascent stages, requiring further examination in the B2B context (e.g., Kumar and Sharma 2022; Cartwright et al. 2021; Iannacci et al. 2020). Additionally, social media research in the context of B2B is recent, however it is increasingly growing with current results demonstrating that within the broader scope of marketing, there is a lack of awareness regarding the impact of social media in B2B firms (Cartwright et al. 2021). This is also highly relevant to social CRM context, as it derives from social media.

Lastly, this study examines the moderating role of customer-centric management systems on entrepreneurial orientation and social CRM capabilities relationship. According to Trainor et al. (2014), customer-centric management systems are viewed as organisational resources. These systems, structured to prioritise and manage customer relationships efficiently, and are regarded as valuable assets, playing a significant role in enhancing a firm's competitive advantage. In this regard, entrepreneurial orientation offers insights into the way a firm's internal resources contribute to its competitive advantage (Thoumrungroje and Racela 2013). Prior study (Trainor et al. 2014) has confirmed that customer-centric management systems have a positive influence on social CRM capabilities. However, it is also important to understand its

moderating role in the context of this study as the dimensions of entrepreneurial orientation – innovativeness, proactiveness, risk-taking, autonomy, and aggressiveness – can act as paths through which entrepreneurs create systems of practices and managerial strategies to guide the effective use of resources (i.e., customer-centric management systems) to achieve competitive advantage (Miao et al. 2017; Chirico et al. 2011).

To bridge these gaps, three research questions guide the current study 1) *How does* entrepreneurial orientation influence social CRM capabilities in B2B firms operating in emerging markets? 2) Do social CRM capabilities lead to enhanced firm performance in B2B firms operating in emerging markets? 3) How do customer-centric management systems influence the relationship between entrepreneurial orientation and social CRM capabilities in B2B firms in emerging markets?

#### 1.6 Context of This Study

The focus of this study is B2B firms in an emerging market, Turkey. For the current study, all B2B industries have been considered (e.g., logistics, investment banking, wholesale textile, etc). Due to their nature, B2B firms operate in complex and dynamic environments. In comparison to B2C firms, where the purchasing decisions involve multiple stakeholders such as decision-makers, suppliers, buyers, shareholders, investors, and employees are based on long-term business relationships (Andersson and Wikström 2017). Therefore, building and maintaining long-term relationships is crucial in B2B markets. This research examines the influence of entrepreneurial orientation on social CRM capabilities within the context of B2B firms in Turkey. Compared to B2C firms, B2B firms typically deal with diversity in customer needs and a higher degree of product complexity that necessitates the adoption of effective strategies to adapt to the rapidly changing environmental conditions to maintain their competitive edge (Chen et al. 2012). Achieving this agility requires the implementation of an entrepreneurial mindset (Atuahene-Gima et al. 2001), as such a mindset equips firms to swiftly respond to evolving market conditions, which is a critical aspect for succeeding in the dynamic B2B environment.

Moreover, the choice of Turkey as a study context is significant due to country's current state of instability, predominantly influenced by economic and political factors. Notably, as of September 2023, Turkey's inflation rate stands at 61.5% (Statista 2023). The past year alone (2023) has seen the country struggling with different challenges, including a significant election, political unrest, an economic crisis, and a series of earthquakes whilst the ongoing effect of the global pandemic is still continuing. All of these challenges have had an impact on businesses, where some businesses needed to shut down. Emerging markets, such as Turkey, are characterised by high levels of uncertainty, constrained resources, and volatile dynamics, which aligns with foundations of effectuation theory that is predicated on uncertainty. In such markets, where traditional planning may prove less effective, an effectual approach enables entrepreneurs to adapt swiftly and flexibly to changing circumstances. This approach facilitates the identification innovative opportunities and the development of resilient businesses. Given this context, the present study integrates the RBV, dynamic capabilities, and effectuation theory, with the aim to enhance the understanding of social CRM capabilities in B2B firms. Specifically, this research investigates how these firms can leverage their social CRM capabilities to respond to evolving customer demands and achieve enhanced firm performance, particularly in unstable environments. It is important to understand how B2B firms can effectively navigate and success in unpredictable market conditions.

Furthermore, number of social media users in Turkey have been continuously increasing over the past years, from 56.24 million in 2019 to be expected to reach to 77.93 in 2028, with the current number standing at around 70 million users (Statista 2023). This rise in the use of social media has been recognised by the firms and most firms have been implementing social media channels for business purposes (Keke 2022). However, there is still very little knowledge on how B2B firms in Turkey uses social media. To the researcher's knowledge, there is only one study conducted on social CRM in Turkey (Dogan-Sudas et al. 2022), which provides an initial understanding of into the relationship between social CRM and firm performance, concluding that social CRM strengthens the relationship between CRM and firm performance. However, this study does not specifically examine the B2B context, and social CRM capabilities, rather focussed on the social media marketing efforts. Additionally, this study does not consider the entrepreneurial perspective, and its effect on developing capabilities.

#### 1.7 Research Objectives

The overall research aim of the present study is to provide theoretical and empirical insights into social CRM capabilities literature, particularly in the context of B2B firms that are operating in emerging markets, by examining how entrepreneurial orientation influences firm's social CRM capabilities, and its outcome of firm performance, while also examining the how customer-centric management systems moderates the relationship between entrepreneurial orientation and social CRM capabilities. From this predominant aim, and in response to the identified research gap, three core objectives have been formulated:

- Empirically examine the relationship between entrepreneurial orientation and social CRM capabilities in the B2B context
- 2. Empirically understand the influence of social CRM capabilities on firm performance in the B2B context
- 3. Empirically examine the impact of customer-centric management systems on entrepreneurial orientation and social CRM capabilities relationship in the B2B context

#### 1.8 Contributions to the Theory and Practice

This study aims to offer both theoretical and practical contributions. Firstly, this research conceptualises and measures social CRM capabilities. Despite the increased attention in both academia and the industry, social CRM is still a new phenomenon which is underexplored (Yasiukovich and Haddara 2021). Thus, there is a paucity of knowledge on social CRM capabilities (Kim and Wang 2019). Secondly, this research examines the influence of entrepreneurial orientation on social CRM capabilities in B2B firms in Turkey. To the researcher's knowledge this is the first study to examine this relationship. Additionally, this study extends the theoretical lenses have been examined within the context of social CRM by integrating the effectuation theory for the first time in social CRM literature. It is important to understand the influence firm's entrepreneurial mindset on developing social CRM capabilities, and eventually leading to enhanced firm performance. Thirdly, this study

examines the moderating role of customer-centric management systems on the entrepreneurial orientation and social CRM capabilities relationship by combining the RBV, effectuation, and dynamic capabilities theories. Lastly, this research delineates a connection between social CRM capabilities and firm performance in the B2B context and emerging markets. From the practical implication's perspective, this study aims to offer insights to B2B practitioners operating in emerging markets. As the main research area being social CRM capabilities, this study provides understanding on how B2B firms can utilise their entrepreneurial orientation to develop stronger social CRM capabilities, and lead to firm performance. This study utilised a subjective measure for firm performance (discussed in Chapter 3). It has been suggested that objective measures are generally more reliable than subjective measures because managers may be hesitant to highlight weaknesses and might instead exaggerate their firms' performance (Razouk 2011; Bjorkman and Budhwar 2007; Pavlovskaya 2000, Fey et al. 2000; Powell 1992; Dess and Robinson 1984). Additionally, the use of subjective measures can be problematic in studies where the same informant provides data for both the explanatory variables and the performance measures, potentially leading to common method bias (Podsakoff et al. 2003). For the current study, this is not the case (discussed in Chapter 6), as carefully collected subjective data can be equally valid and reliable (Singh et al. 2015). Despite concerns about the potential biases in subjective measures, they remain a popular method for evaluating firm performance among researchers, especially in the management field (Camps and Luna-Arocas 2012; Ndofor and Priem 2011). This is because obtaining objective data from firms is challenging due to privacy concerns (Singh et al. 2015). Although the industry relies on explicit data such as return on investment (ROI), revenue and profit, the results of this study can be highly beneficial for B2B practitioners. For example, subjective measure of firm performance can provide critical insights that complement quantitative data, offering a more holistic understanding of a firm's position and effectiveness.

#### 1.9 Outline of the Thesis

This thesis is structured into seven chapters.

Chapter 1, Introduction, the current chapter starts with a concise overview on social CRM and a review of the relevant existing literature. The chapter continues with the discussion on various theories, elaborating on how these theories have been utilised in previous research. This chapter then discusses the specific context of this study, explaining the rationale behind the choice of the country of focus and highlighting the existing gaps in the literature. Concluding the chapter are the research objectives, which articulate the key areas examined in this study.

Chapter 2, Literature Review, delves into a detailed assessment of both conceptual and empirical literature on social CRM capabilities. This extends the research in this area which has been discussed in overview above. The chapter begins by addressing social CRM and reviewing the current literature on the topic. As part of this, the importance of social CRM capabilities in the B2B context is also discussed. The chapter then continues to discuss the theories - RBV, dynamic capabilities, and effectuation theory-, and their relation to this study. Lastly, the outcome of social CRM capabilities – firm performance- is discussed to understand the relationship between these two variables.

Moving onto Chapter 3, Conceptual Model and Hypotheses Development, utilising the literature from chapter 2, develops a conceptual model on the proposed relationships, including the antecedents on social CRM capabilities, and the moderating role of customer-centric management systems. This chapter also includes hypotheses development of entrepreneurial orientation dimensions and their expected relationships on social CRM capabilities, and social CRM capabilities on firm performance, alongside with the moderator of the expected relationships, are discussed and hypothesised relationships are stated. The chapter also includes the conceptual model.

Chapter 4, Methodology, presents a comprehensive discussion of the quantitative methodology employed to examine the conceptual model introduced in Chapter 3. It provides discussion on the choice of surveys, and method of administration. Additionally, detailed discussion on the operationalisation for all variables involved in the study and the description of the process of developing measurement instruments for each construct is included. The chapter then proceeds

to describe the administration of pre-testing and a pilot study, including the outcomes of these tests and any changes made to the measurement instruments based on these results. The final section of the chapter discusses the administration of the main survey. This includes the sampling method, data collection processes, analysis of response patters, and examination of non-bias. This chapter ensures a thorough understanding of the research methodology, setting a foundation for the subsequent analysis of the study's findings.

Chapter 5, Descriptive Analysis, details the findings of the descriptive analysis conducted on the survey responses and explain the processes and outcomes of the measure development procedure. It includes statistics that describe the central tendencies and distributions of the responses, complemented by appropriate graphical representations. These analyses aim to thoroughly describe the characteristics of the firms. Additionally, this chapter outlines the development of measuring scales for the study's variables, employing both exploratory and confirmatory factor analyses. Prior to their integration into the model testing phase, these measures were evaluated for reliability and validity. The chapter then moves on to explain and conduct the measure development process for the targeted constructs. This chapter also includes the fit indices of the model, and the discriminant validity analysis. This comprehensive approach ensures that a robust evaluation of the constructs and supports the integrity of the model testing process.

Chapter 6, Analysis, presents the results of the model testing procedure. The overall analysis strategy, structural equation modeling, is discussed and justified. Additionally, the other analytical decisions such as moderation testing, general assumptions of the data and maximum likelihood are outlined in this chapter. The chapter also includes a discussion on the hypotheses, presenting the results of the hypotheses testing. Finally, the chapter concludes with the detailed discussion on the common method bias.

Chapter 7, Discussion and Conclusion is the final chapter of this thesis. The chapter concludes the thesis by integrating the key findings presented in earlier chapter with the existing body of literature. The chapter conducts an examination of the implications of these findings to existing theoretical frameworks. Subsequently, the chapter examines the practical implications of these findings for practitioners operating in B2B firms particularly in emerging markets, offering recommendations on developing stronger social CRM capabilities to achieve firm performance. The chapter concludes by acknowledging the limitations of the current study and

proposing several directions for future research to build upon and extend the insights gained from this study.

#### 1.10 Chapter Summary

This introduction chapter of this thesis offers an overview embodying the background, research context, objectives, theoretical lenses, contributions to theory and practice, and the outline of the thesis. It begins by discussing the background of social CRM, and the existing literature. This chapter also identified the research gaps, providing a thorough discussion. Further, in line with the identified research gaps, the chapter presents the research objectives. Finally, the outline of the thesis is presented. Building on these discussions, the next chapter, Literature Review, discusses the current literature on social CRM as well as provides a robust discussion on the RBV, dynamic capabilities, and effectuation theories.

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.1 Chapter Introduction

Social media is becoming increasingly used within the B2B context (Kumar and Sharma 2022). This is due to the rapid growth on the information relation technologies which allowed social media to be a great opportunity for the B2B firms. Previous literature suggests that social media can significantly benefit firms (Siamagka et al. 2015). Due to its interactive nature, social media enables B2B firms to have effective two-way communication with their customers (Keinänen and Kuivalainen 2015). This allows firms to instantly act, and generate and disseminate information, and respond to customers. Social media also have the potential to establish capabilities which could turn into effective resources resulting in higher performance and competitive advantages (Siamagka et al. 2015). Although the importance of social media in the B2B context is widely known, the current literature on social media and its impacts mainly focused on the B2C context with limited focus received in the B2B setting (Cao and Weerawardena 2023). Considering that B2C and B2B firms have significant differences in regard to their operational and contextual characteristics (i.e., Baabdullah et al. 2021; Iankova et al. 2019; Trainor et al. 2014), there is a need to further investigate the strategic use of social media in the B2B context (Cartwright et al. 2021)

Social CRM is a social media marketing strategy that has the highest degree of strategic maturity compared to social commerce strategy, social content strategy, and social monitoring strategy (Li et al. 2021). It has been defined as "a philosophy and a business strategy, supported by a system and a technology, designed to engage the customer in a collaborative interaction that provides mutually beneficial value in a trusted and transparent business environment" (Greenberg 2010, p.414). This definition is based on the fundamentals of traditional CRM however it further expands the notion by including social elements of organisational behaviour and characteristics, and the communication between firms and customers enabled by the developed technologies (Guha et al. 2018). Greenberg (2010) and Trainor (2012) claimed that social CRM is the integration process, systems, and technologies,

with social media platforms to improve customer relationships. This conceptualisation of social CRM (Trainor et al. 2014; Trainor 2012; Greenberg 2010) has been better reflected in recent advancement in social media and digital technologies that nowadays allow full integration of social media with CRM tools used by firms. Recent approaches to social CRM emphasise the integration of social media channels into CRM platforms where customers can interact with firms via their preferred social media channel such as Facebook, Twitter, and Instagram (Salesforce 2021).

Social CRM capability is a firm-level capability which refers to firms' ability to generate, integrate, and respond to information via customer interactions which is enabled by social media technologies (Trainor et al. 2014). Thus, firms need to be innovative and knowledgeable to combine social media with its CRM and to link the social media data on customer activities to other data sources to produce better innovation opportunities (Choudhury and Harrigan 2014). Although the research on implementing social media and its impact on the performance in the B2B context is continuously increasing, B2B marketers and decision-makers are still struggling to implement social media strategies in their organisations (Tiwary et al. 2021). For instance, in the US and European technology industry, only 29% of decision-makers use social media for business purposes, while 55% only engage in social media for non-business purposes (Smith and Anderson 2018). As social CRM is linked to social media, it is important to further investigate the drivers and outcomes of it in the B2B context.

Furthermore, literature on social CRM capabilities is mainly built on the resource-based view (RBV) and dynamic capabilities theories (Harrigan et al. 2020; Bhatti et al. 2019; Wang and Kim 2017; Choudhury and Harrigan; 2014; Trainor et al. 2014). These studies identified several antecedents and outcomes of social CRM capabilities. Some of these antecedents include social media technology use and customer-centric management systems, and some of the outcomes were identified as customer relationship performance and firm performance (Wang and Kim 2017; Trainor et al. 2014). Previous studies also revealed that investments in IT can be integrated to form new capabilities that eventually enhance firm performance (Harrigan et al. 2020; Kim and Wang 2019; Wang and Kim 2017; Trainor et al. 2014; Malthouse et al. 2013).

The present study considers entrepreneurial orientation as a determinant of social CRM capabilities. Entrepreneurial orientation consists of five dimensions, which are innovativeness,

risk-taking, proactiveness, autonomy, and aggressiveness. Entrepreneurial orientation is perceived as a focal strategic resource, which reflects the firm's beliefs and attitudes of how to conduct business and align with its environment (Lisboa et al. 2011). Previous studies concluded that entrepreneurial orientation is an important strategy for enhancing firm performance (e.g., Basco et al. 2020; Li et al. 2009). In line with the resource-based view (RBV), entrepreneurial orientation is considered to be an important resource. However, entrepreneurial orientation as a resource only has potential value (Lisboa et al. 2011), which is not a sufficient condition for value delivery (Lisboa et al.2011; Barney 1991). In other words, firms need to take strategic actions to capitalise on entrepreneurial orientation to gain a competitive advantage and enhance performance (Murray et al. 2011). To achieve a desirable firm performance, capabilities by which firms' resources are deployed, should also be considered (Morgan et al. 2009; Eisendhardt and Martin 2000). Therefore, entrepreneurial orientation needs the development of organisational capabilities to fully utilise its value to the firm (Lisboa et al. 2011).

The present study investigates the influence of entrepreneurial orientation on the social CRM capabilities and its outcome on firm performance. This study draws on the resource-based view, dynamic capabilities, and effectuation theories to critically investigate the antecedent conditions by which entrepreneurial orientation facilitate social CRM capabilities and firm performance. The following sections provides more detailed discussions.

Accordingly, the current study sets out three primary objectives. These are provided in chapter one but is repeated here. Specifically, the current study aims to:

- Empirically examine the relationship between entrepreneurial orientation and social CRM capabilities in the B2B context
- 2. Empirically understand the influence of social CRM capabilities on firm performance in the B2B context
- 3. Empirically examine the impact of customer-centric management systems on entrepreneurial orientation and social CRM capabilities relationship in the B2B context

#### 2.2 Social Customer Relationship Management (CRM)

In recent years, CRM has evolved from a strategical perspective in which firms utilise customer data to maintain and manage customer relationships from a more tactical view (Perez-Vega et al. 2022). CRM has been defined as 'a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments' (Payne and Frow 2005, p.168). This means that CRM can tie the relationship between marketing strategies and IT to produce long-term relationships with customers and other stakeholders. Thus, this idea identifies CRM as both a strategy and a method for employing information technology to support marketing activities that generate customer value (Trainor 2012).

The importance of managing customer relationships have long been established with the last three decades have witnessed an increased interest (Perez-Vega et al. 2022; Arora et al. 2021; Stokić et al. 2019). Although the concept of CRM with its focus to maintain the long-term customer relationships via the use of information technologies first emerged in 1990s (Payne and Frow 2005), the concept of social CRM has gradually evolved to utilise new technologies from traditional CRM to electronic CRM, mobile CRM and finally to social CRM (Aldaihani et al. 2020; Harrigan et al. 2020; Choudhury and Harrigan 2014; Greenberg 2010a). With the emergence of social media, communications between the firm and customers have changed from one-way to two-way interactions. This means that the firms are able to track and respond to their customers quickly in comparison to traditional relationship management. Subsequently, traditional views of CRM, which have its roots on the operational and transactional approach, have some limitations in an interactive context where the communication is two-way (Greenberg 2010a).

Social media have triggered a shift in the structural operational modes of all aspects of firms such as marketing and operations, finance, and human resource management (Aral et al. 2013). In addition, social media transformed the way firms collect and analyse customer data to offer tailored products or services according to customer's needs (Guha et al. 2018; Trusov et al. 2010). Furthermore, CRM can benefit from social media and its characteristics (Harrigan et al. 2020). Social media enables interactive, real-time, and personal approaches, which initiates CRM and relationship marketing principles (Stephen and Toubia 2010). Moreover, B2B firms

have recognised this shift and are making considerable investments on social media. Managers are responsible for the integration of social media applications and their existing CRM systems to develop new capabilities to improve customer experiences (Wang and Kim 2017; Trainor et al. 2014) and firms started considering developing social CRM capabilities to facilitate their customer-related performance (Kim and Wang 2019).

Furthermore, this merger of traditional CRM with social media has further extended the concept of CRM with incorporating a more interactive, cooperative, and network-focused approach to manage customer relationships (Wang and Kim 2017; Trainor et al. 2014). The new term 'social CRM' describes this new approach of developing and maintaining customer relationships (Greenberg 2010). Social CRM has been defined as "the integration of customerfacing activities, including processes, systems, and technologies, with emergent social media applications to engage customers in collaborative conversations and enhance customer relationships" (Trainor 2012, p. 319). Although the traditional definition of CRM is still mostly valid, the rapid interest in social media both from customers and firms, indicated a need to reconsider the traditional view of CRM (Trainor 2012.). As the communication models have evolved from one-to-many to many-to-many, which means firms can have a two-way interactive communication with their customers, traditional views of CRM have changed. Whilst the traditional CRM focussed on an operational and transactional approach, it has some limitations when applied in the new communication models where there is a highly dynamic and interactive context including the customers interactions (Greenberg 2010a). Therefore, the new term 'social CRM' has emerged to describe this new way of communication and maintaining customer relationships. Previous literature confirmed that with the rise of the Internet, especially on social networking platforms like Facebook, Twitter, Instagram, and Snapchat, has created various opportunities and challenges for marketers aiming to manage customer relationships (Malthouse et al. 2013). These authors also note that social CRM technologies provide new avenues for acquiring, retaining, and ending relationships with consumers. Choudhury and Harrigan (2014) expanded on this by proposing a theoretical model that integrates social networking technologies with traditional CRM solutions. Additionally, Parveen et al. (2015) demonstrated the positive impact of adopting social CRM on customer relationship management and customer service activities. Lastly, Ruokolainen and Aarikka-Stenroos (2016) concluded that social CRM is the most cost-effective CRM technology, providing a substantial advantage for companies with constrained advertising, marketing, and customer service budgets. However, while the potential value of social CRM technologies is acknowledged, merely having access to these technologies is not enough for social CRM success (Perez-Vega et al. 2022). Firms must also have the necessary capabilities to effectively utilise the data collected from social media platforms (Foltean et al. 2019; Wang and Kim 2017; Trainor et al. 2014). Social CRM capabilities is discussed in the next section.

#### 2.3 Social CRM Capabilities

Increase in the use of social media has led firms to develop new CRM capabilities which are beyond the traditional strategies (Kim and Wang 2019; Wang and Kim 2017; Pansari and Kumar 2017; Trainor et al. 2014). Firms can develop new capabilities by combining social media with their existing CRM systems which can increase the customer satisfaction and enables firms to manage their customer relationships on these interactive platforms (Kim and Wang 2019; Trainor et al. 2014). With this in mind, firms have recognised the shift in marketing and making considerable investments in their social media marketing. In 2022, social media marketing spends stood at approximately 230 billion dollars, with spending expected to exceed the 300-billion-dollar mark by 2024 (Statista 2023). Although the literature highlights the importance of social media in B2B firms, there is still a lack of research in the B2B context (Cartwright et al. 2021). Current research mainly focuses on the strategical use of social media platforms (Cartwright et al. 2021; Trainor et al. 2014) ignoring the effectiveness of social CRM (Yasiukovich and Haddara 2021; Trainor et al. 2014), social CRM capabilities and its influence on firm performance (Kim and Wang 2019). Previous literature reported that CRM technologies alone may not add value directly to firms and are most effective when combined with other firms' resources (Kim and Wang 2019; Trainor et al. 2014; Jayachandran et al. 2005). These resources include technological resources, financial resources, and organisational resources. However, to date, most research focussed on the technological resources such as social media technology use, and scant research examines the organisational resources. Trainor et al. (2014) discovered that the effect of social media technologies on relational performance is influenced by the firm's social CRM capabilities, particularly its ability to derive actionable insights from social media data. Their study suggests that social media technologies are most effective when integrated with robust customer relationship management systems, underscoring the complementary nature of these resources. Choudhury and Harrigan (2014) similarly emphasise that social media technologies serve primarily as enablers of relationships and require additional complementary customer management capabilities and a foundational relational orientation. Cheng and Shiu (2019), in their study on the impact of social media-based customer involvement on innovation performance, argue that success relies on the combination of two critical capabilities: the ability to build and develop networks through social media, and the capability to process and analyse the gathered information. Building on the research by Wang et al. (2013), Guha et al. (2018) suggest that long-term cultivation of these capabilities can lead to the development of dynamic capabilities, thereby enhancing both relational and overall firm performance. Further advancing this notion, Harrigan et al. (2020) identify social CRM as a 'second-order dynamic capability,' which includes social CRM technology capabilities, customer engagement initiatives, and social information processes, serving as a mediator between technology inputs and performance outcomes. Appendix 1 provides overview of the literature review.

Previous literature has mainly drawn from dynamic capabilities and resource-based view theories. Although these theories can justify the relationship between some antecedents such as technology resources and social media technology use, and social CRM capabilities, they cannot provide further justification under uncertain business environments (Mero and Haapio 2022). Thus, this study examines the influence of entrepreneurial orientation on social CRM capabilities to enhance firm performance through the lenses of resource-based view, dynamic capabilities, and effectuation theories. The next three sections discuss these theories.

#### 2.4 Resource-based View (RBV) Theory

The resource-based view (RBV) suggests that the firms' internal resources can lead to sustainable competitive advantage (Barney 1991). In the RBV theory, firms' resources refer to all capabilities, assets, firm attributes, and other factors that are controlled by the firm, which can be used to implement strategies to achieve a competitive advantage within the business environment (Varadarajan 2020). Thus, the RBV can be perceived as an internally driven perspective in contrast to the externally driven approach, which suggests that firms' competitive advantage come from external market forces such as competitors (Kull et al. 2016;

Porter, 1985). The RBV of the firms assume that heterogeneous industry positions are the outcome of firms utilising the resources that are valuable, rare, inimitable, and non-substitutable (VRIN) to achieve and maintain a competitive advantage (Varadarajan 2020; Barney 1991). Also, it has been identified that valuable and rare resources are related to competitive advantage which can lead to enhancing firm performance (Newbert 2007a).

Furthermore, research on social CRM has its theoretical foundations based on the RBV and dynamic capabilities theories (e.g., Harrigan et al. 2020; Bhatti et al. 2019; Wang and Kim 2017; Choudhury and Harrigan 2014; Trainor et al. 2014; Rapp et al. 2010). From social CRM perspective, this can explain how firms use resources and capabilities to achieve and maintain firm performance and gain competitive advantage by using resources effectively (Choudhury and Harrigan 2014). The RBV explains how firms use a variety of internal resources to maintain a competitive advantage (Rapp et al. 2010), which leads to an enhanced firm performance based on valuable and unique resources that are available within the firm (Choudhury and Harrigan 2014; Keramati et al. 2010). On the other hand, capabilities imply that developing a combination of resources will lead firms to achieve enhanced performance (Day 1994). This has been repeated in IT and marketing literature on the RBV theory, which can explain that the firms' assets and capabilities lead to attained performance (Choudhury and Harrigan 2014; Wade and Hulland 2004).

Moreover, researchers in marketing (e.g., Kim and Wang 2019; Roberts and Grover 2012; Chang et al. 2010; Hooley et al. 2005; Melville et al. 2004) and in IT (Chang et al. 2010; Borges et al. 2009) have concluded that resources alone may not be sufficient to enhance firm performance, however, instead resources should be converted into distinctive capabilities (Trainor et al. 2014). These findings indicate that investments in hardware and software to support CRM may not lead to performance enhancements. However, enhanced firm performance arises when capabilities are produced by utilising technology resources with the combination of other organisational resources (i.e., entrepreneurial orientation and customercentric management systems) (Trainor et al. 2014). Considering this logic, entrepreneurial orientation needs to be combined with existing CRM processes to form a firm-level capability to enhance firm performance.

Furthermore, social CRM has emerged as a vital domain in the context of modern business strategies, especially as firms harness the power of social media and digital technologies to

engage with customers. The RBV theory, which focuses on how firms can achieve a competitive advantage by effectively managing their unique resources and capabilities, offers a relevant lens through which to understand social CRM capabilities. Existing literature has explored the intersection of RBV theory and Social CRM capabilities, shedding light on how firms can utilise their resources and capabilities to enhance firm performance and achieve competitive advantage. For instance, Trainor et al. (2014) focused on how social media technology use and customer-centric management systems contribute to a firm-level capability of social CRM. They found that social media technologies and customer-centric management systems have an interactive effect on the formation of a firm-level capability which is shown to positively relate to customer relationship performance. They have also revealed that there is a significant direct influence of customer-centric management systems on social CRM capabilities in B2B firms. Wang and Kim (2017) examined how social media usage can help firms build new CRM capabilities and improve firm performance and marketing adoption strategies. They built their research on the RBV, and dynamic capabilities theory and they have concluded that social CRM capability is important when firms merge social media into their marketing strategies to improve customer engagement and firm performance. Harrigan et al. (2020) investigated the differences between social CRM and traditional CRM, and they built on the RBV and dynamic capabilities theories to explain how social media as a resource that most firms use can lead to different performance outcomes. They have concluded that social media, as a free resource, should definitely not be adopted on an ad-hoc basis for promotional or data mining purposes, by separate marketing and information systems teams. As they also demonstrate, success rates of use of social media vary widely, and their conclusion is in line with the previous studies as the success depends on the managers' ability combine social media as a resource with capabilities. Following the previous literature, this study also builds on the RBV theory to understand the influence of entrepreneurial orientation as a resource on social CRM capabilities. As mentioned above, resources need to be combined with the capabilities to achieve performance outcomes. Thus, this study also builds on dynamic capabilities theory, which is discussed in the next section.

#### 2.5 Dynamic Capabilities

The dynamic capabilities theory suggests that the environments where firms compete are dynamic, and that firms possess different capabilities by which they acquire and deploy resources (Perez-Vega et al. 2022). Dynamic capability theory builds on the idea on how a raw resource, such as social media, can be combined with an existing organisational capability, such as CRM, to gain competitive advantage (Harrigan et al. 2020). Dynamic capability theory has its roots in the RBV of the firms, which claims firm's have the ability to leverage internal resources to distinguish themselves from competitors and eventually achieve better performance outcomes (Teece 2018). It shapes this idea by introducing the significance of developing and utilising strategic and tactical abilities in using these resources to achieve performance benefits (Harrigan et al. 2020; Bharadwaj 2000). Therefore, technology resources do not impact directly to performance, however it provides the initial foundation to form and renew organisational capabilities and an ability to maintain and improve these capabilities to eventually enhance firm performance (Harrigan et al. 2020; Banker et al. 2006; Peppard and Ward 2004). Investments in CRM systems only will not necessarily improve firm performance; yet improved firm performance occurs when specific marketing capabilities are created by deploying CRM technological resources in combination with other resources (Wang and Kim 2017; Trainor et al. 2014) such as organisational resources. Also, findings suggest that performance outcomes depend on the firm's ability to leverage IT, rather than IT itself (Nam et al. 2019). This can be possible via social media as social media technologies have become powerful enablers for CRM (Li et al. 2021; Choudhury and Harrigan 2014). For instance, Charoensukmongkol and Sasatanun (2017) claim that the integration of social media and CRM provides a possibility for firms to segment their customers based on similar characteristics and can tailor marketing offerings to the specific preferences of individual customers.

Furthermore, dynamic capabilities theory has been gaining interest by academics since Teece et al's (1997) study. Commonly, dynamic capabilities are identified as firms' ability to anticipate, shape, and adapt to changes within the firm's competitive environment (Mero and Haapip 2022; Felin and Powell 2016; Teece 2016). Dynamic capabilities can be categorised as either sensing, seizing, or transforming capabilities (Mero and Haapip 2022; Baden-Fuller and Teece 2020; Teece 2012). *Sensing Capability;* is defined as the firm's ability to identify and evaluate market opportunities and threats (Mero and Haapip 2022; Teece et al. 2016; Teece

2010). Sensing can take many forms as it may arise either at the firm or individual level (Teece and Linden 2017) and utilise different information sources (Teece et al. 2016). Thus, it has been proposed that the implementation of sensing capabilities is related to firm's decision-making logic (Mero and Haapip 2022). *Seizing Capability;* entails making strategic choices between identified opportunities and utilising resources to address those opportunities (Mero and Haapip 2022; Teece and Leih 2016; Teece 2012). The ability to respond and act quickly to recognised opportunities specifically in unstable environments is a significant factor of a firm's success (Ngo et al. 2019; Guo et al. 2018), which requires constant developments to resource allocation and fast implementation of new ideas (Mero and Haapip 2022). Transforming means the changes in firms' assets, culture, and structure to adjust to market changes (Teece and Leih 2016; Teece 2014).

*Transforming capabilities*; involves the constant changes of assets and firms' structure to ensure that firms stay coordinated and responsive in rapidly changing business environments (Mero and Haapip 2022; Teece and Leih 2016; Teece 2014). Managers have an important role when adapting to new conditions, which they need to be able to alter both tangible and intangible resources to deal with the new challenges (Harreld et al. 2007).

Furthermore, firms need to have dynamic capabilities that allows them to reconfigure processes and competences to address the uncertainty, which can be caused by the quickly changing environment (Teece 2007). Although there is extensive research on dynamic capabilities over years, most firms are still slow to respond to unexpected market opportunities and threats (Mero and Haapip 2022; Bughin et al. 2018; Silvia et al. 2018). This can be due to the slow actions, which can indicate that the firms rely on causal logic that promotes careful strategic planning before planning responses (Read et al. 2009; Sarasyathy 2001) rather than responding quickly. Uncertainty has been a central aspect in the dynamic capabilities' theory (Teece 2007). However, there is an insufficient theorisation to address unexpected uncertainty (Mero and Haapip 2022). Dynamic capabilities theory highlights that uncertainty is caused by an unpredictable business environment such as rapid technological change and its impact on firms (Schilke et al. 2018; Teece 2007). Dynamic capabilities are suited to uncertain situations due to their focus on change (Mero and Haapip 2022; Sunder et al. 2019; Teece et al. 2016; Eisenhardt and Martin 2000) and are more significant in unstable environments rather than in stable ones (Salvato and Rerup 2011). The typology of uncertainty can be categorised in *state* 

uncertainty, effect uncertainty and response uncertainty (Milliken 1987). State uncertainty is an unpredictable organisational environment in which dynamic capabilities can guide firms to prepare itself; effect uncertainty refers to the unpredictable impacts of environmental changes on the specific firm, again dynamic capabilities are sufficient to enable firms to plan for the impact that can occur from unexpected changes. However, dynamic capabilities theory ignores response uncertainty, which means that a lack of knowledge on different response options and failure to foresee the consequences of those responses (Mero and Haapip 2022). The main difference between the three types of uncertainty is that the state and effect uncertainty can be dealt with by making strategic analyses of threats and opportunities and plan for alternative impacts on the firms whilst the response uncertainty arises when there is a need to formulate a rapid response to a sudden change in the environment (Milliken 1987). Since the effectuation theory is based on the rapid decision-making in an uncertain environment by the entrepreneurs, this study also draws upon the effectuation theory, which is discussed in the next section.

# 2.6 Effectuation Theory

Effectuation theory is a concept in the field of entrepreneurship that offers a unique perspective on how entrepreneurs make decisions and navigate in the uncertain and unpredictable environments. This theory provides a framework for understanding the process and decisionmaking behaviours of entrepreneurs in contrast to more traditional, predictive, or causal reasoning approaches (Sarasvathy 2001). The theory of effectuation is divided into two managerial decision-making logics, which are causal and effectual (Sarasvathy 2001). Causation logic uses environmental predictability as a foundation for decision-making and acting accordingly (Cowden et al. 2022). This sort of decision-making logic is most effective in stable markets, and mature environments where firms are aware of their business environments such as competitors and customers (Welter and Kim 2018). On the other hand, effectuation assumes that under uncertain and unpredictable conditions, entrepreneurs adopt effectual decision-making logic, which is different from causal logic (Laskovaia et al. 2019). Effectuation suggests uncertain and dynamic environments where the future is not planned but created through entrepreneurial actions (Cowden et al. 2022; Welter and Kim 2018). This allows firms adapt to unpredictable environments and explore new opportunities and possibilities without the precommitment. Based on the theoretical conceptualisation of the principles that form the core of the theory of effectuation, five categories emerge. Firstly, the future is considered to be unpredictable, thus effectual decision-makers focus on controllable aspects in contrast to developing predictions on uncontrollable aspects (Mero and Haapip 2022; Maine et al. 2015; Sarasvathy 2001). Secondly, the foundation of taking actions begins with a set of available resources such as technology, knowledge, and skills, as opposed to causal logic where it is based on the business goals (Mero and Haapip 2022, Engel et al. 2017, Sarasvathy 2001). Thirdly, effectuation is concentrated on affordable loss rather than expected returns (Sarasvathy 2001), which mean effectual decision-makers prefer small investments rather than bigger investments that risk more than the firms can afford to lose (Sarasvathy 2001). Fourthly, within the effectuation, knowledge-sharing and collaboration with the partners is a central aspect (Sarasvathy 2001), which helps to build and maintain relationships within the firm. Finally, effectuation assumes that unexpected situations may provide new opportunities (Mero and Haapip 2022), thus, effectual decision-makers are likely to experiment to transform contingences into firm assets (Sarasvathy 2001) as opposed to the causal approach, which assumes that the future is predictable, and they focus on expected returns via planning and predicting the future to protect their assets and resources (Read et al. 2009).

As mentioned above, dynamic capabilities can be categorised as either sensing, seizing, or transforming capabilities (Mero and Haapip 2022; Baden-Fuller and Teece 2020; Teece 2012). These can also be explained via the effectuation theory. Sensing capabilities are particularly important when the market is not stable and undergoing fundamental changes (Mero and Haapip 2022; Yang and Gan 2021). Thus, execution of sensing capabilities depends on the firm's decision-making approach (Mero and Haapip 2022). Effectuation encourages the informal market information, experimentation with creative ideas, and exploitation of contingencies, whereas causation approach suggests formal analysis of market information which is utilised to make predictions of future developments Mero and Haapip 2022; Read et al. 2009, Sarasvathy 2001). Thus, it can be concluded that firms sensing capabilities can be divided into effectual and causal approaches. Although there is not much known about the effectual sensing, research show some elements of effectual sensing activities. For instance, it has been identified that B2B firms need to be quick and flexible to obtain market information in uncertain environments (Guo et al. 2018). B2B research highlights the significance of understanding market knowledge from customers as opposed to competitors (Endres et al. 2020). It is also important to use direct information from B2B customers to be able to respond

to market changes which meets the customer's needs (Guercini et al. 2015), which can be achieved via social CRM as it enables firms to communicate with their B2B customers directly. Focusing on customer information allows firms to be customer-centric avoiding the firmcentric processes (Yli-Renko and Janakiraman 2008). Moreover, seizing capabilities focus on the ability to respond and act rapidly in unstable environments. In line with effectuation theory, causal approach allows firms to choose the best opportunities, which are best aligned with firms' strategic aims and predicted to achieve the highest return on investment (Mero and Haapip 2022) whereas effectual approach enables firms to choose the opportunity that firm can afford to lose and can best adopt with available resources (Mero and Haapip 2022). This is of particularly importance under uncertain environments as firms need to make a quick decision on seizing opportunities with available resources (Baden-Fuller and Teece 2020). Finally, transforming capabilities encourages the constant renewal of assets in rapidly changing business environments where managers have a majority role to adapt both tangible and intangible resources to be able to deal with the unpredictability. Thus, the execution of transforming capabilities depends on the firms' decision-making logics (Mero and Haapip 2022). Causal logic follows a formal and fixed business plan (Read et al. 2009; Sarasvathy 2001) whereas effectual logic highlights the natural changes to existing structures. Thus, transforming capabilities are specifically important when there is a major market change as responding to these changes requires extensive changes to the firms' operations (Mero and Haapip 2022; Jantunen et al. 2018; Gabrielsson and Gabrielsson 2013; Hills et al. 2008).

Furthermore, although the dynamic capabilities and the RBV theories are well-established frameworks within strategic management, highlighting the importance of a firm's resource management, competitive advantage and firm performance, there are areas where these theories have limitations, and effectuation theory can offer support and complementary insights. For instance, as discussed above, both dynamic capabilities and RBV theories primarily focus on leveraging existing resources to achieve competitive advantage and enhance firm performance. However, they are less equipped to address the high levels of uncertainty and unpredictability in entrepreneurial and rapidly changing environments. Effectuation theory, with its focus on affordable loss rather than expected returns, and adaptation to unexpected circumstances, can provide guidance on decision-making in these uncertain situations. In addition, dynamic capabilities and RBV focus on recognising and seizing opportunities in the market. On the other hand, effectuation theory can help entrepreneurs create opportunities, particularly when

the market is uncertain and rapidly evolving which encourages a proactive approach to opportunity development. Moreover, effectuation theory encourages a customer-centric approach whereas dynamic capabilities and RBV can place less focus on direct customer involvement in decision-making. As one of the principles of effectuation theory, precommitment, emphasises involving customers in the development of products and services, which can be valuable in certain contexts. For instance, as social CRM allows firms to communicate with their customers, effectual decision-makers can leverage this capability to improve and tailor their products and services according to the customers' needs and wants.

This study investigates the impact of entrepreneurial orientation on social CRM capabilities in the B2B context with its focus on an emergent market, Turkey. Turkey is considered to be an unstable environment mainly due to the political and economic factors with the inflation rate of 61.5% as of September 2023 (Statista 2023). In the last year alone, the country has faced an election, political instability, economic crisis, and several earthquakes that had a big impact on businesses whilst still continuing to deal with the effects of global pandemic, Covid-19. Emergent markets are often characterised by high uncertainty, limited resources, and unpredictable dynamics. As the core foundation of effectuation theory is based on the uncertain environments, this is highly relevant for this study. In emerging markets, where traditional planning and predictions may be less effective, effectual approach allows entrepreneurs to respond quickly and flexibly to evolving conditions, identify innovative opportunities, and build resilient businesses. Therefore, this study draws from the RBV, dynamic capabilities and effectuation theory to further extend knowledge on social CRM capabilities, and how firms can deploy their social CRM capabilities to meet evolving customer demands and achieve firm performance particularly in turbulent environments.

# 2.7 Entrepreneurial Orientation

B2B firms face more customer heterogeneity and product complexity as opposed to B2C firms, which it is important and essential for B2B firms to adopt effect strategies to respond to rapidly changing environmental conditions to sustain their competitive advantage (Chen et al. 2012). To achieve this, firms need to implement an entrepreneurial mindset (Atuahene-Gima et al. 2001) to be able respond to quickly to evolving conditions. Previous literature highlights that

entrepreneurial orientation is an effective strategy to deal with the threats and competitive pressures (Lumpkin and Dess 1996). Entrepreneurial orientation has been defined as a strategy-making process that portrays firm's entrepreneurship (Shan et al. 2016). Entrepreneurial orientation is particularly relevant in dynamic and competitive markets, and it is critical when dealing with pressures arising from rapidly changing external environment (Covin et al. 2020). Firms that have a strong entrepreneurial orientation are better equipped to identify and seize opportunities, adapt to changing environment, and continuously innovate. Entrepreneurial orientation is significant both for startups, and established firms as it enables them to succeed in turbulent environments. As such, entrepreneurial orientation is vital in firms' entrepreneurial processes, including opportunity recognition, innovation, and opportunity exploitation (Schindehutte et al. 2008).

Furthermore, entrepreneurial orientation highlights the importance of firms' tendency to explore new market opportunities (Boso et al. 2013; Matsuno et al. 2002; Lumpkin and Dess 1996). As such, it establishes itself via a firm's willingness to accept innovativeness, risktaking, proactiveness, aggressiveness and autonomy (Boso et al. 2013; Lumpkin and Dess 1996). Within the entrepreneurial orientation framework, *innovativeness* refers to a tendency to support creative processes and experimentation which may lead to new products and services and technological processes (Rezaei and Ortt 2018; Lumpkin and Dess 1996). Proactiveness is the opportunity-seeking behaviour that creating first-mover advantages ahead of competitors and seeking market leadership positions (Lomberg et al. 2017; Anderson et al. 2015). Risktaking involves engaging in high-risk activities with opportunities of high returns, and risky actions in uncertain environments (Lomberg et al. 2017). Autonomy is defined as an independent action by an individual or team to create vision and complete it throughout (Lumpkin and Dess 2001). Finally, aggressiveness indicates firms' ability to outperform competitors via dynamic response to competitor's actions (Lumpkin and Dess 2001). Entrepreneurial firms are more prone to innovate, seek out new opportunities, and adapt to changing market conditions in which they tend to achieve higher levels of growth, profitability, and overall competitive advantage (Arunachalam et al. 2018). The proactive nature of entrepreneurial orientation allows firms to be better positioned to navigate uncertainty i.e. rapid market changes, technology changes, and economical fluctuations, and capitalise on emerging trends i.e. enhancements in digital technology, changes in consumer behaviour and new market opportunities, ultimately leading to enhanced financial outcomes. Previous literature has found

positive links between the entrepreneurial orientation and firm performance (e.g., Galbreath et al. 2020; Linton and Kask 2017; Boso et al. 2013; Li et al. 2009). It is also concluded that entrepreneurial orientation is not only necessary for firms' performance, but it is also crucial for dynamic and unstable business environment, where market can be characterised by high level of competitive intensity (Gupta and Gupta 2015) such as price-based competition, competitors imitating easily, and rapid moves and counter-moves (Jaworski and Kohli 1993).

Moreover, entrepreneurial orientation has been a vital aspect in strategic management and entrepreneurship research for almost five decades (Wales et al. 2021). From the RBV perspective, entrepreneurial orientation can provide a unique perspective on how firms internal resources and capabilities contribute to its competitive advantage in the entrepreneurial domain (Thoumrungroje and Racela 2013). In addition, entrepreneurial orientation has been perceived as a valuable strategic resource, reflecting a firm's willingness to engage in risky activities through proactiveness and the tendency to innovate (Covin and Slevin 1989). Building on this logic, as the core foundation of the RBV perspective is utilising resources to gain competitive advantage and enhance firm performance, RBV recognises that entrepreneurial orientation is not just a set of behaviours but also an internal resource that can contribute to firms' competitive advantage.

Although entrepreneurial orientation has been an interest to researchers for decades, there is still a lack of literature on the strategic approaches such as effectuation and causation, and firm-level entrepreneurial orientation (Jun et al. 2023). As discussed above, effectuation theory is based on the decision-making behaviours within the entrepreneurs, thus it is highly relevant in the entrepreneurial orientation literature. From the causation approach, direct relationship between causation and entrepreneurial orientation is still lacking however literature suggests that firms that have higher levels of entrepreneurial orientation have a positive relationship with causal approach, which has a positive relationship to firm performance during uncertain times (Laskovaia et al. 2019). Similarly, Mauer et al. (2018) highlighted that entrepreneurs that adapted causal approach focus on the prediction of unexpected situations to outperform the competitors with utilising the rare resources (Yu et al. 2018) to enhance the firm capabilities. However, another study that explored the causal approach in an emergent market concluded that causal logic is not suitable in the turbulent environment as it failed to create positive outcomes (Shirokova et al. 2020).

On the other hand, from the effectual approach, entrepreneurial orientation produces effective strategies for the firm sustainability to solve problems in an uncertain situation (Jun et al. 2023). Firms need to be equipped with innovative and proactive leaders to gain firm performance in unstable environments. Effectuation is an approach that focuses on the available resources, which leaders aim to capitalise on goals that were not essentially predefined (Sarasvathy 2001). This behaviour requires creativity which can lead to innovativeness (Anderson et al. 2015). In addition, creativity stimulates proactiveness and risk-taking within the firms (Chen 2007). Previous literature demonstrated that effectuation's promotion focus, which are flexibility and experiment is positively related to entrepreneurial orientation, whereas precommitment and affordable loss is negatively associated with entrepreneurial orientation in regulatory settings, which researchers have concluded that overall effectuation strongly influences entrepreneurial orientation (Palmié et al. 2019). Another research (Jun et al. 2023) has demonstrated that effectuation positively influences entrepreneurial orientation due to this, effectual decisionmakers can create opportunities via available means by experimenting and modifying. As the effectuation approach have been perceived as a source of benefit in the uncertain and unstable environments (Shirokova et al. 2020; Laskovaia et al. 2019), it is highly relevant to entrepreneurial orientation as it dictates the behaviour of entrepreneurs particularly at uncertain times.

# 2.8 Firm Performance as an Outcome

The use of developments and innovations on the internet within firms have played an important role in firms' performance in the last two decades (Tajvidi and Karami 2021; Kim et al. 2017). These developments on the internet have led to Web.2.0, which provides the opportunity to transfer internet capability to the social environment, where customers are able to interact with the firms via different social media channels (Tajvidi and Karami 2021; Sigala and Chalkiti 2014). Social media has been viewed as an effective strategy for a better firm performance (Rapp et al. 2013). Previous literature has highlighted that B2B marketing is strongly dependent on managing relationships between stakeholders (Kim and Kumar 2018). With these technological developments, communication efforts have been made easier with more frequent interactions (Lin et al. 2020) as social media enables two-way communications between the stakeholders. These interactions in the B2B context are mostly utilised to cultivate more robust

relationships with the intention of shaping customer purchase behaviour via a comprehensive communication approach (Agnihotri et al. 2016). These approaches typically encompass value propositions conveyed from the firm to the customer, and their effectiveness hinges on various factors, such as evaluation of its messages, quality, and consistency (Lin et al. 2020). In this regard, the pivotal role of technological innovations such as IT and social media applications (Jussila et al. 2014) gain competitive advantage and enhance firm performance on B2B firms should not be underestimated (Lin et al. 2020). In the context of this study, competitive advantage refers to firms' ability to maintain or improve their market position despite the uncertainty or rapid changes in the external environment. Achieving competitive advantage can lead to superior market positioning, increased profitability, and long-term sustainability for B2B firms.

Moreover, previous literature highlighted that the development of distinctive capabilities such as CRM capabilities can lead to enhanced firm performance (Diffley and McCole 2015). Research indicates that CRM initiatives positively impact financial (Fan and Ku 2010), and non-financial aspects of firm performance (Jayachandran et al. 2005). From the dynamic capability's perspective as the theory suggests that is where firms operate and compete in a dynamic environment, firms have different capabilities by which they obtain and employ resources (Perez-Vega et al. 2022). Consequently, the performance of firms differs over time (Eisenhardt and Martin 2000). In the context of social CRM, dynamic capabilities perspective has been used to evaluate how the developments of capabilities to generate information, integrate information, and respond to information derived from customer interactions on social media platforms can have an impact on higher levels of customers engagement, and ultimately firm performance (Wang and Kim 2017). Following previous studies (e.g. Trainor et al. 2014) social CRM capabilities are considered to be multi-dimensional in the present study, consisting of information generation from social media applications, information dissemination and responsiveness on social media (Trainor et al. 2014). Although the previous research demonstrated links between social CRM and firm performance, it has been suggested that more evidence is needed to understand the relationship between social CRM and firm performance and develop a clearer consensus on the outcome (Perez-Vega et al. 2022). Thus, this study further extends the previous literature by investigating the influence of social CRM capabilities on firm performance.

Furthermore, over the years, firm performance has become an important dependent variable in management and marketing studies (Taouab and Issor 2019). Firm performance can be measured by using objective and subjective measures. However, due to the difficulty of obtaining objective data from the firms, this study used a subjective measure, which is in line with the previous studies (e.g., Foltean et al. 2019; O'Sullivan and Abela 2007). Several studies have highlighted that managers balance profitability and sales growth (Slater and Narver 1996; McKee et al. 1989), whereas others considered market share as a measure for firm performance (Jaworski and Kohli 1993). In line with the previous studies, this study measured firm performance as the indication of respondents rating for their firm's sales growth, market share, and profit growth relative to their competitors (Foltean et al. 2019; O'Sullivan et al. 2007)

# 2.9 Chapter summary

This chapter provided an overview on the theories that this study adapts, and the review identifies the importance of social CRM capabilities in the B2B context. As it is demonstrated above, it has been highlighted that B2B firms should harness the power of social media and transfer this into distinctive capabilities in the form of social CRM capabilities, which then can enhance the firm performance (Wang and Kim 2017). As discussed, this study draws from three theories, which are resource-based view, dynamic capabilities, and effectuation theory. The RBV theory, which focuses on how firms can achieve a competitive advantage by effectively managing their unique resources and capabilities, offers a relevant lens through which to understand social CRM capabilities. Dynamic capability theory builds on the idea on how a raw resource, such as social media, can be combined with an existing organisational capability, such as CRM, to gain competitive advantage (Harrigan et al. 2020) and enhance firm performance. Although, previous studies have shed some light on social CRM capabilities, there is still much unknown on the phenomenon. Previous literature mainly built on the RBV and dynamic capabilities to understand how firms can utilise social CRM capabilities. However, these studies ignored the decision-making logics of the managers. Therefore, this study also builds on the effectuation theory to extend the knowledge from an entrepreneurial perspective particularly in unstable environments. Addressing these gaps and contribute to theory and practice are the main aims of this study. The next chapter now builds upon this literature review to outline the conceptual model that is tested in this study.

# CHAPTER 3: CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

# 3.1 Chapter Introduction

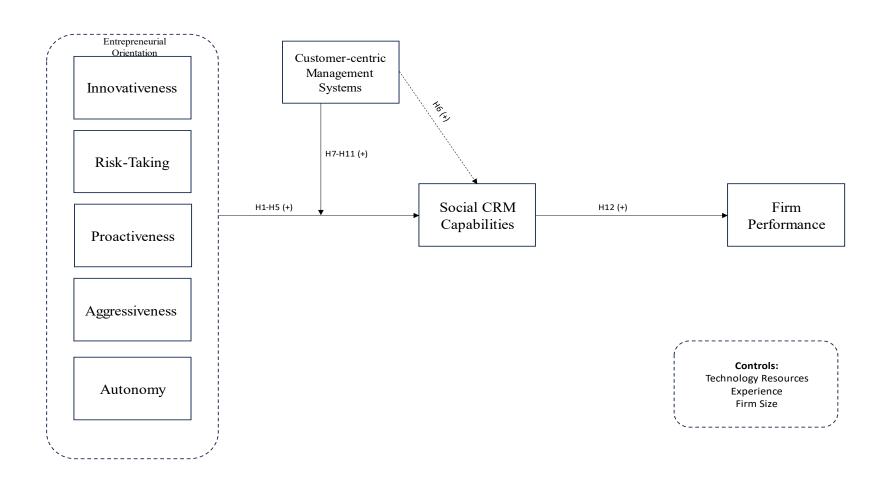
This chapter integrates existing knowledge from a wide range of literature concerning social CRM to generate a set of formal hypotheses regarding the antecedents to, and consequences of, social CRM capabilities. More specifically, the proposed conceptual model in this study explores the relationship between entrepreneurial orientation and social CRM capabilities, and the moderating role of customer-centric management systems in this relationship. In addition, the model depicts the relationship between social CRM capabilities and firm performance.

Figure 1 represents the proposed conceptual model for this study. Here, it can be seen that customer-centric management systems are expected to play a positive moderating role, enhancing the positive effect of entrepreneurial orientation on social CRM capabilities. The framework also proposes a positive direct relationship between customer-centric management systems and social CRM capabilities. Finally, social CRM capabilities is expected to exhibit a positive influence on firm performance, in line with the RBV and dynamic capabilities theories (see sections 2.3 and 2.4).

The proposed conceptual model serves as a guiding framework for the subsequent empirical analysis and hypothesis testing. By testing twelve formulated hypotheses, this study seeks to contribute to the existing literature and provide empirical evidence supporting the relationships theorised within the model. The conceptual model proposes a systematic and structured approach to understand the complex dynamics between the variables, thus enhancing the knowledge on the antecedents of social CRM capabilities and consequence of firm performance.

**Figure 1 Proposed Conceptual Model** 

Antecedents of Social CRM capabilities and its outcome on Firm Performance: The Moderating Role of Customer-Centric Management Systems



# 3.2 Antecedents of Social CRM Capabilities

Social media has the potential to serve as a vital tool for firms that operate in unstable environments to bridge their resources and mitigate uncertainty. By utilising the power of real-time market insights, capabilities for aligning resources and networking opportunities, social media can significantly enhance the overall marketing effectiveness of firms (Omar et al. 2020; Harrigan and Miles 2014). Social CRM is an extension of traditional CRM, which integrates social media platforms to enable firms to engage with customers directly and collaboratively (Greenberg 2010).

In the context of B2B, social CRM capabilities allow firms to leverage social networks for better customer insights, lead generation and enhanced customer relationships. Thus, it may be important for B2B firms to generate such capabilities and develop strategies to aid in the generation of social CRM capabilities. One such strategic direction is entrepreneurial orientation, which refers to a firm's strategic posture that represents its decision-making approaches, methods, and practices with an entrepreneurial aspect (Lumpkin and Dess 1996). For B2B firms, entrepreneurial orientation is particularly crucial as these firms operate in complex environments with longer sales cycles, larger transactions, and fewer customers, in comparison to B2C firms (Morris et al. 2002).

The literature on the relationship between entrepreneurship and social media is still growing and is beginning to draw significant academic interest (Schjoedt et al. 2020). Research on entrepreneurship and social media is relatively new, yet it is becoming a focal point for both researchers and practitioners for further research and analysis (Olanrewaju et al. 2020). Recent studies have shown that entrepreneurial orientation has a significant positive association to social media adoption (Fan et al. 2021; Sahaym et al. 2019). Entrepreneurial orientation encourages firms to adopt social media platforms to develop interactive communication with their customers, connect with the potential customers, and capitalise on cost-effective marketing strategies provided by these platforms (Sahaym et al. 2019; Bughin et al. 2011). Social media also enables firms to observe their competitors and stay knowledgeable on market trends (Sahaym et al. 2019; Bughin et al. 2011).

Furthermore, firms with high entrepreneurial orientations are more likely to adopt new technologies, such as social media, as this will allow them to achieve a first-mover advantage (Nguyen et al. 2022). Thus, it is assumed that entrepreneurial orientation can drive the adoption and effective use of social CRM capabilities, which in turn can enhance firm performance by improving customer knowledge, increased customer engagement, and enabling better response to market dynamics. There are five dimensions of entrepreneurial orientation, which are innovativeness, proactiveness, risk-taking, autonomy and aggressiveness. For example, B2B firms with a strong orientation towards innovation are likely to adopt social CRM tools more extensively. Proactive B2B firms tend to anticipate future market trends and customer needs, using social CRM, they can engage with customers ahead of their competitors. B2B firms that are willing to take risks are more likely to utilise social CRM as aiming for long-term strategic benefits and competitive edge.

Although, it has been demonstrated that entrepreneurial orientation has an impact on social media (Nguyen et al. 2022; Dutot and Bergeron 2016; Valos et al. 2015), to the researcher's knowledge, current literature has not focussed on examining the impact of entrepreneurial orientation on social CRM capabilities. While social CRM uses social media to leverage these platforms to have better customer relationships, these concepts are different as social media is a broader scope, and social CRM is specifically focussed on using social media for customer relationship management. To be able to do that, firms should be equipped with social CRM capabilities. Thus, it is important to understand the drivers and outcomes of social CRM capabilities as this concept is different to social media. The next sections discuss each dimension of entrepreneurial orientation.

#### 3.2.1 Innovativeness and Social CRM Capabilities

The first dimension of entrepreneurial orientation to be explored is innovativeness, which represents firms ability to foster creative and original ideas (Hanif et al. 2018). Also, it empomasses the degree to which firms introduce new products, services, processes, or technologies (Al-Omoush et al. 2021; Miller and Friesen 1982). In the context of social CRM, firms need to be innovative to combine social media with their existing CRM (Choudhury and Harrigan 2014). This means developing creative and engaging ways to interact with customers

on social media platforms, setting trends rather than following them, and consequently, enhancing the firm's social CRM capabilities.

Firms with high innovativeness are better positioned to exploit their internal resources to develop advanced social CRM capabilities. In addition, firms with a strong innovativeness are more agile and can continuously innovate their social CRM practices. This includes adopting new social media technologies, experimenting with novel customer engagement strategies, and rapidly adjusting to market feedback (Eisenhardt and Martin 2000). Innovation enahnces the level of cooperation among firms and establishes greater differentiations, leading them to adapt to new market opportunities (Ireland et al. 2001). Consequently, firms with higher innovativeness are expected to have stronger levels of social CRM capabilities.

Additionally, in emerging markets, where technological environments can change rapidly, innovativeness drive firms to adopt and integrate social media tools into their CRM systems, which is important for staying competitive and relevant. Innovativeness encourages firms to experiment and adapt, which is crucial in the uncertain environments of emergind markets, which is in line with effectuation theory. This appocah allows B2B firms to iteratively refine their social CRM strategies, adapting to market changing conditions, a core principle of effectuation theory (Sarasvathy 2008).

Prior research elucidated the role of social media as a focal open source platform for innovation in the delivery of products and services, tailored to customer needs (Yong and Hassan 2019; Yunis et al. 2018). Additionally, existing literature confirmed that the actions of employing social CRM and fostering social networks have an affect on the innovation of products and services, which in turn influence firm performance, customer contentment, and organisation branding (Zhang et al. 2017; Woodcock et al. 2011). Furthermore, some studies argued that the use of social media influences several entreprenurial aspects (i.e. innovativeness) of firms, and some researchers have identified that social media usage is critical for developing capabilities that are helpful for enhancing the success of business development and improving relationships with other stakeholders (Camilleri 2019; Trainor et al. 2014; Laroche et al. 2013; Sashi 2012). Additionally, Al-Omoush (2021) found a positive relationship between social CRM entreprenurship and performance of CRM processes, where they examined innovativeness, proactiveness, and risk-taking dimensions with social CRM, and the outcomes of customer acquisation, customer retention, customer expansion, and relational information processes.

Although previous literature shed some light on the importance of innovativeness in the adoption and usage of social media, to date there is a lack of research investigating all the dimensions of entreprenurial orientation in the social CRM literature. Following these discussions, in the context of emerging markets, innovatiness plays a crucial role in shaping how B2B firms develop and utilise social CRM capabilities by encouraing adaptatibility, and leveraging available resources in experimentation.

Therefore, the following hypothesis is proposed:

H1: Innovativeness is positively related to social CRM capabilities.

#### 3.2.2 Risk-taking and Social CRM Capabilities

As previously discussed, the risk-taking dimension of entrepreneurial orientation involves engaging in high-risk activities with opportunities of high returns, and risky actions in uncertain environments (Lomberg et al. 2017). In turbulent environments, such as Turkey (Statista 2023), risk-taking is often necessary to take advantage of new opportunities, creating a more innovative culture that helps companies to evolve faster (Kreiser and Davis 2010), and be more adaptive to evolving markets (Garrett et al. 2009).

On social media customers engage with firms in real-time around the clock (Rust et al. 2021), with other third parties being able to view these interactions, and firms less able to control these (Grégoire et al. 2015). Thus, the social media platform is characterised by higher levels of uncertainty (Kraus et al. 2018), as brand-customer interactions can quickly multiply, resulting in a rapidly dynamic environment where the severity of issues can spiral out of control at a much greater pace (Kraus et al. 2018). However, considering that social media is a platform being increasingly used within the B2B environment (Kumar and Sharma 2022), and one that has the potential to bring a significant return on investment, the platform presents a significant opportunity to increase a company's returns, and so despite the risks involved regarding the use of social CRM, in line with effectuation theory firms who have a higher level of risk-taking entreprenurial orientation are more likely to invest in social CRM, given their higher tolerance for uncertainty, and favourable attitude towards exploring new possibilities that can result in significant returns. This implies that B2B firms that are operating in emerging markets, despite

the unpredictability of market responses, focus on affordable loss rather than potential gains (Sarasvathy 2001). Thus:

H2: Risk-taking is positively related to social CRM capabilities.

#### 3.2.3 Proactiveness and Social CRM Capabilities

Proactiveness is another dimension of entrepreneurial orientation, which refers to opportunity-seeking and visionary perspectives that involves new products and services, surpassing competitors, and operating with foresight regarding future demand to create change and shape the environment (Hanif et al. 2018; Lumpkin and Dess 1996). The ability to anticipate future challenges, evolving needs, or potential shifts enables firms to shape the environment and gain competitive advantage (Morgan and Strong 2003).

Prior literature confirmed that social CRM serves as a pivotal business strategy, fostering new avenues for sales, marketing, and customer service, whilst increasing customer advocacy, retention, and market penetration which enables firms to gain deeper insights into customer behaviour (Yunis et al. 2018; Dutot and Bergeron 2016). In addition, social CRM offers innovative opportunities for firms to acquire extensive customer data, enhancing the efficacy and cost-efficiency in comparison to traditional CRM approaches (Woodcock et al. 2011). Proactive firms are likely to be early adopters of social media technologies, enabling them to leverage these platforms more effectively for the purposes of social CRM before their competitors. This early adoption can be particularly beneficial in emerging markets, where technological trends can rapidly shift. Thus, it is particularly important for B2B firms to be proactive to utilise social CRM capabilities as it enables firms to gain competitive advantage.

Moreover, firms with a proactive entreprenurial orientation often adopt new technologies and platforms earlier than their competitors (Bhatia 2021). Social CRM is a new and disruptive technology (Harrigan et al. 2020), thus this early adoption can extend to social CRM capabilities, allowing these firms to leverage these capabilities for better customer interaction, data collection, and analytics before their competitors. Additionally, from effectuation theory perspective, proactiveness involves a proactive and adaptive approach to market dynamics. In emerging markets, proactive firms are more likely to utilise social CRM that are adaptable to

the rapidly changing market conditions, aligning with the effectual emphasis on agility and flexibility (Sarasvathy 2001). These discussions lead to the consideration that proactiveness is a crucial determinant of social CRM capabilities, no literature has explored this relationship.

Consequently, the following hypothesis is proposed:

*H3: Proactiveness is positively related to social CRM capabilities.* 

#### 3.2.4 Aggressiveness and Social CRM Capabilities

Aggresiveness is a dimension of entreprenurial orientation that reflects firms tendency to directly and intensely challenge its competitors to improve their position, which is often associated with bold and risky actions (Lumpkin and Dess 1996). Firms mostly need to be aggressive to compete with other firms by adopting new technologies and launching new products and services in the market (Dess and Lumpkin 2005). In the context of B2B, firms face more dynamic competition (Li et al. 2020), where the risks are higher as processes may take longer between the organisational stakeholders (Garrido-Samaniego et al. 2010). From the RBV standpoint, aggresiveness is a resource that can contribute to firms competitive advantage (Barney 1991), whereby having an aggressive entreprenurial orientation may encourage firms to aggressively pursue social CRM capabilities. This would allow them a resource which would help to outmanoeuvre competitors, better understand market dynamics, and engage with customers more effectively. From an effectuation theory perspective, the theory emphasises the importance of using all available means known to entreprenurs, and thus firms with aggresiveness may see social CRM capabilities not just as tools for customer engagement, but as a means to expand networks, identify new opportunities, and engage in colloborative innovation with stakeholders (Read et al. 2009). In addition, effectuation theory's fundamental principles revolve around the idea of embracing and leveraging uncertainty. Aggresiveness, when combined with this logic, could drive firms to further develop their social CRM capabilities to identify emerging trends, engage with diverse customer segments, and capatalise on unpredictable market shifts (Wiltbank et al. 2006). In line with these discussions, aggresiveness can be considered as an important antecedent for social CRM capabilities, both from the RBV and effectution theories perspectives. Thus, the following hypothesis is posited: H4: Aggressiveness is positively related to social CRM capabilities.

#### 3.2.5 Autonomy and Social CRM Capabilities

The last dimension of entrepreneurial orientation to be discussed is autonomy, which refers to the extent to which individuals or teams within a firm are empowered to make independent decisions and take initiative without the need for constant supervision or approval (Lumpkin and Dess 1996). From a social CRM perspective, the relationship between autonomy and social CRM capabilities captures the dynamics between firm's internal decision-making freedom, and its external customer engagement strategies, which are facilitated through social media platforms. Autonomy is fundamentally characterised by a firms' inclination for innovation and proactive stance (Rauch et al. 2009). This proclivity towards innovation naturally aligns with the adoption and effective deployment of social CRM tools, which are essentially innovative combinations of social media and traditional CRM practices (Trainor 2012).

Moreover, autonomy referred as an independent action by an individual or team to create vision and complete it throughout (Lumpkin and Dess 2001). This can potentially create a beneficial experimenting with emerging technologies, particularly in the domain of social CRM, thus potentially gaining a competitive advantage. This is because autonomy allows firms to be agile, adopting to a rapidly changing environment, which is instrumental in developing dynamic capabilities as it allows firms to respond swiftly to market changes and customer needs (Eisenhardt and Martin 2000). As discussed in Chapter 2, social CRM capabilities, which involves the integration of social media with traditional CRM, can be viewed as a distinctive organisational capability that leverages resources to develop and maintain customer relationships (Trainor et al. 2014; Trainor 2012). This is particularly significant in emerging markets such as Turkey, as customer needs and demands are constantly changing, and firms should be able to respond quickly to these changes. Furthermore, from the effectuation theory perspective, autonomy aligns with the means available to an entrepreneur, and can be seen as a starting point, leveraging existing resources and capabilities to navigate uncertain market environments (Sarasvathy 2001). Additionally, from an effectuation perspective, social CRM can be viewed as an outcome of the effectual logic, where entrepreneurs use their autonomy

and resources to create and evolve these capabilities in response to market changes and emerging opportunities (Sarasvathy and Dew 2005).

Although there is extensive literature on entrepreneurial orientation in different contexts such as its relationship to market orientation and firm performance (e.g., Li et al. 2009; Chen et al. 2012; Boso et al. 2013; Govin et al. 2020; Wales et al. 2021) and social CRM (Greenberg 2010; Choudhury and Harrigan 2014; Trainor et al. 2014; Harrigan et al. 2020; Al-Omush et al. 2021), there is no study specifically exploring the relationship with all the dimensions of entrepreneurial orientation and social CRM capabilities. As discussed above, the autonomy dimension is important and relevant in the social CRM literature, thus more focused research in this area is needed to establish clearer knowledge.

Consequently, the following hypothesis is proposed:

H5: Autonomy is positively related to social CRM capabilities.

# 3.3 Customer-Centric Management Systems and Social CRM Capabilities

Social CRM has emerged as one of the most effective systems for supporting various business operations (Garrida-Moreno et al. 2020; Harrigan et al. 2015), including customer service, marketing, sales and lead generation customer relationship management, and product development. These systems represent an advanced phase or an evolutionary progression from traditional CRM initiatives, emphasising the extensive utilisation of social media to meet customer requirements (Greenberg 2010). Social CRM helps firms to gather and consistently produce customer knowledge, enabling interactions and two-way communication with the existing and potential customers, as well as enhancing knowledge management processes (Foltean et al. 2019). The B2B context is considered complex due to the involvement of multiple aspects and customisation requirements. These aspects include multiple stakeholders (i.e. executives, managers, employees, suppliers and customers), long-term considerations and decisions, complexity of decisions, and tailored solutions. Thus, building and maintaining relationships in B2B markets is vital for both suppliers and customers (Karampela et al. 2020), and social media enables B2B firms to have effective two-way communication with their

customers (Keinänen and Kuivalainen 2015), therefore B2B firms can benefit from the nature of social media to build and maintain their customer relationships.

Moreover, customer-centric management systems are defined by the extent to which firms adapt and tailor their business processes and systems to prioritise customer needs (Jayachandran et al. 2015). Although business processes refer to the various activities that a firm undertakes such as producing goods or services, delivering them to customers, and managing its operations, in the context of this study, it specifically means the steps and methods a firm uses to ensure that customer needs and preferences are prioritised. Particularly, in the context of social CRM, this means that the integrated activities such as social listening and monitoring, engagement and interaction, data analytics, tailoring and targeting, and customer service, which leverage social media platforms to manage customer relationships and interactions. Existing research on CRM highlights the significance of customer-centric management systems as critical components in supporting firm's customer-focused culture, and these systems entail both structural and technological aspects that ensure organisational actions are directed by customer needs (Kim et al. 2012; Hillebrand et al. 2011; Reimann et al. 2010). Furthermore, customer-centric management systems enhance firms' ability to concentrate on customer interactions, shape the development of information process, and are poised to impact the effectiveness of CRM initiatives (Jayachandran et al. 2005). The adoption of these customer-centric systems, and the shaping of an organisation to centre around customer-centric processes, enables greater levels of social CRM capabilities in various ways (Trainor et al. 2014). First, such systems are indicative of a firm's customer orientation, which involves the organisation wide gathering, sharing, and the use of intelligence about the customers, as well as coordinated actions based on this intelligence (Trainor et al. 2014; Deshpande et al. 1993), something which has been linked to the development of capabilities (Rapp et al. 2010). Second, customer-centric systems and processes facilitate the coordination of actions with customers, enhancing firms' ability to comprehension of its customers, fostering collaboration with them, and enabling timely responses to their needs (Day 1994). Third, these systems enable the implementation of information technologies and motivate employees to dismantle functional barriers and promote the sharing of information across the firms (Cooper et al. 2008; Chen and Popovich 2003; Day 2003). Previous literature highlighted that customer-centric management systems improve firms' ability to focus on customer interactions, and significantly impacting the effectiveness of CRM initiatives (Jayachandran et al. 2005). The adoption of customer-centric management systems involves the implementation of advanced technologies. According to Cooper et al. (2008), these technologies, including social CRM tools, are integral to managing customer relationships effectively particularly in a digitalised environment. Finally, Trainor et al. (2014) find a direct influence of customer-centric management systems on social CRM capabilities in the B2B context. However, the context of this study was based in the US, which is a developed country. Considering that developed countries and emerging markets have differences, such as available resources within the firms to further investigate this in a different context, this study proposes the following hypothesis:

H6: Customer-centric management systems is positively related to social CRM capabilities.

# 3.4 The Moderating Role of Customer-Centric Management Systems on the entrepreneurial orientation/social CRM capabilities Relationship

Firms' ability to swiftly recognise and respond to evolving customer needs in becoming a vital firm capability (Gustafsson and Khan 2017). The main entrepreneurial activities extend beyond just developing new products or services ahead of competitors; they also involve actively engaging in comprehending and responding to the evolving needs and expectations of customers (Fraccastoro and Gabrielsson 2018; Gustafsson and Khan 2017). In the modern era, entrepreneurship has emerged as one of the most captivating concepts within both management and information technology disciplines (Al-Omoush et al. 2021). With the developments in information technologies, social media has been introduced to firms to communicate with their customers. These developments have led to the introduction of new customer-centric tools that allows customers to interact with other customers and with the firms (Trainor et al. 2014; Kietzmann et al. 2011). Particularly, applications such as LinkedIn and Facebook have changed from completely customer-specific tools to customer-centric tools that enables firms to be involved in the interactions between customers (Trainor 2012).

Furthermore, customer-centric management systems can be considered as an organisational resource (Trainor et al. 2014). These systems, which are designed to prioritise and effectively

manage customer relationships, are seen as valuable assets that can contribute significantly to firms' competitive advantage. From the RBV perspective, resources are defined as assets, organisational processes, firm attributes, information knowledge, etc., controlled by a firm that enable the firm to implement strategies that improve its efficiency and effectiveness (Barney 1991). Customer-centric managements systems, due to its nature, fit this definition as they are organisational resources that firms can use strategically. Additionally, entrepreneurial orientation can provide a perspective on how firms internal resources contribute to its competitive advantage of firms within the market position against their competitors (Thoumrungroje and Racela 2013). Entrepreneurial orientation has also been perceived as a valuable organisational resource (Covin and Slevin 1989). Previous literature has demonstrated that resources should be combined with organisational capabilities such as social CRM capabilities to achieve competitive advantage (Harrigan et al. 2020; Trainor et al. 2014). Thus, resources alone do not contribute directly to performance, but provide the foundations and renew organisational capabilities, alongside the ability to maintain, adapt and enhance these capabilities to achieve firm performance (Harrigan et al. 2020; Banker et al. 2004). This integration aligns with the dynamic capability's theory, which highlights the importance of firm's ability to integrate, build, and reconfigure internal and external resources in response to rapidly changing environments (Teece et al. 1997). Additionally, entrepreneurial orientation as referred as a firm's strategic orientation, which is linked to the identification and execution of new opportunities and reflects the decision-making styles, practices, and methods that control the firm's activities (Lumpkin and Dess 1996). In this regard, the fundamental components of entrepreneurial orientation; innovativeness, proactiveness, risk-taking, autonomy, and aggressiveness, serve as pathways through which entrepreneurs develop systems of practices and managerial approaches to direct the utilisation of resources in ways that leads to competitive advantage (Miao et al. 2017; Chirico et al. 2011). Building on these discussions, when combined, entrepreneurial orientation and customer-centric management systems create an interactive relationship that enhances social CRM capabilities. Entrepreneurial orientation can drive firms to innovative and proactive engagement with customers, while customercentric management systems provide the structural and technological support to utilise these engagements effectively.

Thus, this study considers that firms that are equipped with entrepreneurial orientation will achieve higher levels of social CRM capabilities in the presence of customer-centric

management systems. The next five sections discuss the relationships between each dimension of entrepreneurial orientation and social CRM capabilities in the presence of customer-centric management systems.

#### 3.4.1 Innovativeness, Customer-centric Management Systems and Social CRM

#### **Capabilities**

Innovativeness is a crucial dimension of entrepreneurial orientation, signifying a firm's ability to create and implement unique concepts and approaches (Hanif et al. 2018). It encompasses the degree to which a firm establishes innovative products, services, or new technologies (Miller and Friesen 1982). It has been highlighted in the literature that the utilisation of CRM for developing and sustaining long-term customer relationships is fundamental to enhancing a firm's capacity for innovation (Bahrami et al. 2012). Moreover, customer-centric management systems are designed to gather and analyse large volumes of customer data to tailor the customer experience and develop long-term relationships (Shah et al. 2021). These systems can enhance social CRM capabilities, which encompass the strategies and technologies used by companies to manage and analyse customer interactions and data through social media channels (Greenberg 2010).

In the presence of customer-centric management systems, the innovativeness aspect of entrepreneurial orientation can be more effectively transformed into enhanced social CRM capabilities. For instance, innovations in customer service processes or communication methods can be quickly integrated into social CRM platforms, making these innovations more responsive and adaptable to changing customer expectations (Trainor 2012). Additionally, customer-centric management systems involve collecting and analysing customer, in which when combined with innovativeness, firms are more likely to utilise this data creatively to enhance their social CRM capabilities.

In emerging markets, where competition is intense and continuous, innovativeness and customer-centric management systems can provide a firm with a distinct competitive advantage, which is achieved through customer insights and innovative strategies. To conclude, firms with innovativeness and customer-centric management systems are more likely to focus

on innovations that can enhance customer experiences, such as social CRM. Therefore, innovativeness can lead to higher levels of social CRM capabilities when firms have higher levels of customer-centric management systems.

Conversely, the following hypothesis is proposed:

H7: Customer-centric management systems positively moderates the relationship between innovativeness and social CRM capabilities.

#### 3.4.2 Risk-taking, Customer-centric Management Systems and Social CRM Capabilities

Risk-taking involves the ability to make calculated yet bold choices in uncertain environments, carefully mitigating the elements of risk (Miller and Friesen 1982). It includes the readiness of a firm's management to allocate critical resources to ventures with a notable chance of substantial loss (Scheepers et al. 2007). Literature suggests that deploying CRM technology becomes crucial in highly uncertain market environments where firms are pursing competitive advantages via innovative strategies (Askool and Nakata 2011; Nasution et al. 2011).

A customer-centric approach can provide firms with the necessary insights to control the risks associated with new ventures (Kohli and Jaworski 1990). It enables firms to understand customer needs, which can guide the development of innovative technologies, thus aligning risk-taking with customer driven innovation. With it is customer focus, firms that take risks will likely invest in risks related to customers as the outcome can lead to stronger customer relationships. In this context, social media allows customers to interact with firms, thus utilising social CRM enables firms to swiftly respond to customer needs. A risk-taking approach, underpinned by a strong focus on customer needs, enables firms to adapt their social CRM strategies quickly in response to market changes, with the continuous alignment with customer expectations. This ensures that risk-taking is informed by customer-centric approach, potentially leading to more successful innovation and adaptation in dynamic markets (Kohli and Jaworski 1990). Thus, risk-taking can positively influence social CRM capabilities in the presence of high levels of customer-centric management systems.

Consequently, the subsequent hypothesis is posited:

H8: Customer-centric management systems positively moderates the relationship between risk-taking and social CRM capabilities.

# 3.4.3 Proactiveness, Customer-centric Management Systems and Social CRM

#### **Capabilities**

Proactiveness has been defined as the constant attempts to pursue opportunities, with the intent to outperform competitors by responding proactively to evolving market dynamics (Morgan and Strong 1998). It embodies the pursuit of new business opportunities despite the fluctuating environmental challenges and constantly launching of new products and services to satisfy future customer needs and anticipate market demands (Hanif et al. 2018). Customer-centric management systems provide the data and insights that can encourage proactive decision-making. Proactiveness ensures that the insights gained from customer-centric management systems are not just reactive but are used to strategically align the business towards future opportunities (Narver and Slater 1990).

Furthermore, it has been indicated that in the literature that a customer-centric strategy enables firms to leverage their entrepreneurial orientation to create value through innovative customer engagement processes (Ngo and O'Class 2013). Similarly, it has been suggested that that by using customer-centric systems to direct proactive efforts, companies can better utilise social CRM capabilities to gain customer loyalty and enhance firm growth (Agnihotri et al. 2016). To sum up, customer-centric management systems can shape the impact of a firm's proactiveness on its social CRM capabilities by ensuring that proactive actions are closely aligned with customer insights, thus leading to more effective and innovative customer engagement strategies. Therefore, proactive firms can have higher levels of social CRM capabilities, when they also have higher levels of customer-centric management systems. Thus, the following hypothesis is proposed:

H9: Customer-centric management systems positively moderates the relationship between proactiveness and social CRM capabilities.

# 3.4.4 Aggressiveness, Customer-centric Management Systems and Social CRM

#### **Capabilities**

Aggressiveness indicates firms' ability to outperform competitors via dynamic response to competitor's actions (Lumpkin and Dess 2001). Customer-centric management systems ensures that firms aggressive strategies are aligned with customer needs and preferences. This alignment can enhance the impact of social CRM capabilities because it ensures that competitive strategies are also customer-focused (Shah et al. 2006). Additionally, a customer-centric approach helps firms to adapt their social CRM strategies to customer feedback and behaviours more effectively (Trainor et al. 2014). This can enhance the benefits of aggressive strategies by ensuring the firms remain relevant and responsive to market changes.

Moreover, customer-centric management systems provide rich customer insights that enable firms to make more informed and aggressive strategic decisions to outperform competitors particularly in unstable market environment. Understanding customer needs and preferences allows firms to tailor their strategies (Kumar 2018), in which firms can become more customer focused. Another dimension of entrepreneurial orientation, aggressiveness, can lead to higher levels of social CRM capabilities when supported by customer-centric management systems. To conclude, customer-centric management systems can leverage customer data and insights to help aggressive strategies which can lead to higher levels of social CRM capabilities. Thus, the subsequent hypothesis is posited:

H10: Customer-centric management systems positively moderates the relationship between aggressiveness and social CRM capabilities.

# 3.4.5 Autonomy, Customer-centric Management Systems and Social CRM Capabilities

Autonomy, a dimension of entrepreneurial orientation, empowers individuals or teams to develop and implement ideas that can be beneficial to the firm, which can lead to innovation and competitive advantage (Slevin and Terjesen 2011). The empowered individual or team from a high level of autonomy can engage more with customers as they have access to

information through customer-centric management systems and the authority to act on it, which can enhance customer experiences (Menon et al. 1999) and can lead to higher social CRM capabilities. Autonomy allows for quick decision-making and flexibility in actions. If the firms have high levels of customer-centric management systems, the combination of autonomous firms and the deep data on customer information can enable decision-makers to tailor their social CRM initiatives to customer needs more effectively. Additionally, as customer-centric systems provide a real-time customer data, this can enhance the responsiveness of autonomous individuals or teams to customer feedback and trends, which are observed through social CRM tools, therefore improving customer satisfaction and loyalty (Greenberg 2010). In summary, the interaction between autonomy and customer-centric management systems can create a ground for the development of and enhancement of social CRM capabilities as such systems can empower a firm's ability to be more agile, innovative, and responsive their customer, better leveraging social media for CRM purposes. Thus, the following hypothesis is posited:

H11: Customer-centric management systems positively moderates the relationship between autonomy and social CRM capabilities.

#### 3.5 Firm Performance as an Outcome

Dynamic capabilities theory has been derived from the RBV of the firms, which suggests that a firm's ability to leverage internal resources allows it to achieve better performance outcomes (Teece 2018). This can be explained via the combination of social media and CRM to achieve enhanced performance outcomes. This is because dynamic capability theory builds on the idea that raw resource, such as social media, can be integrated with an existing organisational capability, such as CRM to gain competitive advantage and enhanced firm performance (Harrigan et al. 2020). In line with the RBV and dynamic capabilities theories, previous literature highlights that developing distinctive capabilities can lead to enhanced firm performance (Menguc and Auh 2006; Day 1994). Thus, firms that are able to convert existing resources and capabilities into renewed capabilities are more likely to improve their performance (Wang and Kim 2017).

Several studies have found that marketing capabilities are positively associated with firm performance for both large and small firms (e.g., Shin 2013; Morgan et al. 2009; Fahy et al. 2000). Additionally, cross-functional marketing capabilities such as CRM has the same potential to improve firm performance (Wang and Feng 2012; Morgan et al. 2009). Other studies (Foltean et al. 2019; Coltman 2007) emphasized that CRM capabilities build an advantage that enhances firm performance. Due to its nature, social CRM capabilities increase efficiency related to customer communications and internal management (Wang and Kim 2017). Therefore, firms that have higher levels of social CRM capabilities should have enhanced firm performance. From this perspective, Wang and Kim (2017) found a positive a relationship between social CRM capabilities and firm performance. However, although this study demonstrated an initial link, the context of the study is the US firms. Considering there are differences between developed countries and emerging markets, it is important to also test the relationship in an emerging market, focussing on B2B firms.

In line with these discussions, the following hypothesis is posited:

H12: Social CRM capabilities are positively related to firm performance.

#### 3.6 Chapter Summary

This chapter presented the conceptual model for this study and discussed the development of hypotheses. The model tests the relationship between entrepreneurial orientation and social CRM capabilities with the outcome of firm performance. Moderating role of customer-centric management systems have also been discussed. It is argued that that customer-centric management systems will positively moderate the relationship between all the dimensions of entrepreneurial orientation and social CRM capabilities, which will lead to firm performance. The expected relationships are discussed, with these being entrepreneurial orientation have a positive influence on social CRM capabilities, and in the presence of customer-centric management systems, these relationships will stay positive. Finally, in line with the previous literature, this study also examines the influence of social CRM capabilities on firm performance, which is expected to have a positive relationship.

RBV, dynamic capabilities and effectuation theories serve as the theoretical foundations for this study. As discussed, resources should be combined with capabilities to achieve competitive advantage and performance outcomes. Customer-centric management systems are considered to be an organisational resource, therefore together with social CRM capabilities, firms can achieve higher performance outcomes. Effectuation theory, on the other hand, is a concept in the field of entrepreneurship that offers a unique perspective on how entrepreneurs make decisions and navigate in the uncertain and unpredictable environments. This can help entrepreneurs to create opportunities, particularly when the market is uncertain and rapidly evolving which helps entrepreneurs to take a proactive approach for opportunity development.

# **CHAPTER 4: RESEARCH METHODOLOGY**

# 4.1 Chapter Introduction

The foundational elements for the conceptual model were established in preceding chapters, and this chapter shifts focus to the methodological approach employed to gather data for effectively testing the hypotheses developed in Chapter 3. This chapter starts with the discussions on the philosophical views of the researcher within the context of this study, then addresses research design considerations. This includes evaluating data collection tools and determining the appropriate sample for testing the hypotheses of the current study, which are also the most appropriate for achieving the aim of the study and the objectives. Subsequently, the chapter describes the development of the measurement instruments, the operationalisation of the constructs, and the validation of these instruments. Lastly, the chapter discusses the questionnaire design, including the pilot studies, and the main study, elaborating on response rates and the measures taken for potential biases. Also, the chapter discusses ethical issues linked to data collection, in which the University guidelines were followed.

#### **4.2 Research Assumptions**

Research philosophy is a term to describe the researcher's assumptions or beliefs about the knowledge development (Saunders et al. 2023). There are three main research assumptions to classify research philosophies; ontological, epistemological, and axiological (Saunders et al. 2023). Ontology reflects the nature of reality (Saunders et al. 2023). These researchers often question whether their understanding of beliefs, principles or constructs true or false (Lincoln et al. 2011 and Sandberg 2005). On the other hand, epistemology reflects the assumptions about knowledge (Saunders et al. 2023). Epistemological research methods are used to understand the examined phenomena (Lincoln et al. 2011) whilst questioning the valid and legitimate knowledge (Burrell and Morgan 2017). Researchers that adapt epistemology are often categorised as positivists, interpretivists, and post-positivists (Lincoln et al. 2011). Finally, axiology reflects the role and ethics in the research. Axiologist researchers have the need to

impact their own values and beliefs on their research as a positive thing, which they need to make a choice on how to deal with their own values and the people they are researching (Saunders et al. 2023). This research adapts an epistemological perspective. Compared to ontology, epistemology provides a wider range of methods, with the relevance of these methods often being more apparent since ontology can be concise (Saunders et al. 2023). This is elaborated below.

# 4.3 Research Philosophy

As discussed above, research philosophy reflects the researcher's assumptions about the development of knowledge. In Business and Management research, there are five main philosophies: positivism, interpretivism, postmodernism, critical realism, and pragmatism (Saunders et al. 2023)

Positivism reflects the philosophical stance of the natural scientist and involves capturing the social reality (Lee 1991). The importance of positivism is that positivist researchers take a realist perspective, and strictly focus on the scientific methods which are designed to yield pure data whilst staying unbiased by the human interpretation (Saunders et al. 2023). Interpretivism, on the other hand, focuses on the human behaviour or their understanding on certain situations either as individuals or in a group (Eriksson and Kovalainen 2015). The aim of interpretivist researchers is to create new and extensive understanding of social contexts. Therefore, they embrace the human involvement whereas positivist researchers reflect the realism as they try to avoid the human interpretation.

Furthermore, this current research adopts a positivist philosophy. Positivism forms the philosophical foundation for the social sciences, emphasising quantitative data, specific hypotheses, and principles such as behaviourism, operationalism, and methodological individualism (Hjørland 2005). From a positivist viewpoint, reality is seen as independent of human perception. Additionally, literature highlights the importance of experimental and survey research designs in positivism, bridging social science methodologies (Johnson and Duberley 2000).

# 4.4 Research Approach

Research approaches have been defined as plans and procedures that range from key assumptions to specific methods of data collection, analysis, and interpretation (Creswell 2014). There are two primary contrasting approaches that have been identified; deductive, which is often associated with quantitative studies, and inductive, which is typically qualitative (Kothari 1990). A deductive approach, theory-driven in nature, is adopted when a researcher commits to a defined theoretical stance prior to data collection. Conversely, an inductive approach involves developing a theoretical explanation through the exploration of a topic (Saunders et al. 2019).

Furthermore, in the inductive approach, the analysis of data patterns is key to identifying relationships between variables and forming generalisations, relationships, and even theories (Gray 2004). Researchers employ a process of accumulating observations to recognise underlying principles. This approach is particularly suited for exploring and understanding the meanings associated with social or human problems. Data is gathered in the natural settings of participants, and interpretations are made by analysing overarching themes. Creswell (2014) notes that this method emphasises individual meanings and captures the complexity of a situation. Conversely, a deductive approach involves testing objective theories by examining the relationship between variables (Creswell 2014). It includes hypotheses testing, where the relationships between two or more variables are investigated. These constructs need to be operationalised so that they can be empirically observed and tested (Gray 2004). This approach is characterised by its structured methodology and focus on quantifiable data.

The present study adopts a deductive approach as this study draws from existing theories, RBV, dynamic capabilities and effectuation theory. The deductive approach is considered appropriate for this research as it facilitates the empirical testing of the proposed hypotheses and allows for a thorough examination of the relationships between the variables.

#### 4.5 Methodological Choices

#### 4.5.1 Research Design

In any research project, aligning the study design with the research objectives is crucial for yielding meaningful answers to the research questions (Lee and Lings 2008). Given that the decisions regarding research methodology in this chapter are influenced by these objectives, it is pertinent to reiterate them here. The three main objectives of the current study are:

- Empirically examine the relationship between entrepreneurial orientation and social CRM capabilities in the B2B context
- 2. Empirically understand the influence of social CRM capabilities on firm performance in the B2B context
- 3. Empirically examine the impact of customer-centric management systems on entrepreneurial orientation and social CRM capabilities relationship in the B2B context

Research in social sciences mainly build on quantitative and qualitative methods (Lo et al. 2020). Qualitative research is typically used in exploratory research to build a holistic framework to interpret the phenomenon under study whereas quantitative research methods are used to analyse the relationships between variables to determine whether the predictive generalisation of a theory is appropriate for a given population (Esteban-Bravo and Vidal-Sanz 2021, Deshpande 1983).

A quantitative research design is more appropriate to the present study as opposed to a qualitative research design, and the reasons are listed below. Firstly, qualitative research designs are more appropriate when the theory is not well developed in the context of under study, or the understanding of the phenomenon is still unknown. The theory behind the main variable of the present study, social CRM capabilities, is well developed and derived from dynamic capabilities and as discussed in Chapter 2, dynamic capabilities should be combined with the firm's resources to attain more competitive advantage. This posits the RBV theory which is also well developed. Moreover, the research objectives of this study include testing relationships between variables such as entrepreneurial orientation and social CRM capabilities and the outcome of firm performance. Qualitative research is not able to test the relationships

between variables as fundamentally it is to explore views in a specific environment (Ritchie et al. 2013). As presented in Chapter 3, this study examines the relationship between entrepreneurial orientation dimensions and social CRM capabilities, with the outcome of firm performance. Therefore, to be able to investigate these relationships, a quantitative approach is the most appropriate research design for the current study.

Experiment designs research are also commonly used in social sciences research. Similar to quantitative survey designs, experiments can also test the relationships between two variables and with its roots in natural science, it is often labelled as the 'gold standard' (Saunders et al. 2023). Experimental designs involve selecting participants and randomly assigning them to an experimental group. This present study focuses only on the B2B firms. Therefore, it is an extremely difficult situation to navigate. This study aims to investigate the impact of entrepreneurial orientation on social CRM capabilities, and it is outcome on firm performance. Therefore, it is concluded that due to the nature of this study and the practicality, quantitative survey research design has been chosen to achieve the research aim and objectives.

#### 4.5.2 Survey research method

Surveys are considered to be a cheaper option, can reach a larger number of people, and can generate findings to contribute theory and practice (Crick 2023, Hulland et al. 2018). Surveys allow researchers to investigate certain topics and not necessarily asking questions to respondents directly. The survey questionnaire strategy allows researchers to collect data which can be analysed quantitatively in which it allows to generalise the findings. However, to achieve valid and reliable results, firstly the questionnaire design is extremely important, secondly the sample needs to be representative and finally the pilot study has to be carried out (Saunders et al. 2023).

This study administrated an online data collection as this method allows efficiency (Bhaskaran and LeClaire 2010). With the development in technology and individual's usage of internet, online data collection has been increased as individuals are able to complete the survey at anytime and anywhere. This has shown by a survey completed in the UK as it has been found

that the average time spent online was 24.9 hours a week in 2020, an increase of 15 hours compared to 2005 (Statista 2022). One potential drawback of an online survey collection is that some respondents may not provide high-quality accurate data (Lampone 2008). These respondents can be identified as speeders and straightliners. Speeders are the respondents that do not pay attention to questions and complete the survey very fast without considering the questions (Johnson 2016). Straighliners, on the other hand, are the respondents that respond with the same answers throughout the survey regardless of the questions (Johnson 2016). To address these issues and to ensure the quality of the data, respondents who completed the survey in less than seven minutes and provided the same answer throughout the questionnaire are removed from the data. This also ensures to eliminate any potential bias could have occurred.

To conclude, this present study utilised an online survey collection method. Although the initial aim was to gain access to firms middle and top management members, it was not possible. Therefore, a third-party data collection company was used to collect data in a timely manner which will be discussed below. Pilot study was conducted to ensure the quality of the data.

#### 4.5.3 Cross-Sectional Data versus Longitudinal Data

In any research study with a practical focus, it is essential to align the methodological design with the study's objectives. Several critical factors must be considered when deciding on data collection methods, including resource availability, time constraints, and participant accessibility (Churchill and Iacobucci 2006). In this current study, time constraints play a critical role, given that a typical PhD spans three years. Given this limitation, a cross-sectional study design is favoured as it can capture data at a single point in time, making it less resource-intensive than collecting longitudinal data, which would need participants completing surveys on at least three separate occasions (Little 2013).

A cross-sectional research design entails the collection of data from a sample of cases at a specific moment in time. Researchers gather a set of quantitative data related to multiple variables, which is subsequently analysed to identify patterns of association (Clark et al. 2021). This is in contrast to the longitudinal research design, which is a distinctive approach characterised by the repeated collection of data from participants over time. Due to its nature,

longitudinal designs are less common in social research as they require substantial time and cost commitments (Clark et al. 2021). Considering this particular research, the data was collected from B2B firms top and middle management members. Due to the time constraints and the availability of participants, it has been concluded that cross-sectional study is the best fit for this study. Utilising a quantitative cross-sectional research approach enables the identification of substantial associations between variables that hold relevance across diverse business environments (Eggert and Helm 2003).

### 4.6 Sampling

This study aims to investigate the impact of entrepreneurial orientation on social CRM capabilities and its outcome on firm performance. Sampling is one of the crucial aspects in methodological choices as the population should reflect the research objectives and the conceptual model. This means that chosen population should be justifiable in relation to answering research questions and meeting the research objectives (Becker et al. 1998).

Previous studies on social CRM have mainly utilised respondents who are in top and middle management (Al-Omoush et al. 2021, Harrigan et al. 2020, Trainor et al. 2014). Members of top-management are usually considered as decision-makers of the firm which demonstrates that they are familiar with the values and ideas within the firm (Trainor et al. 2014, Hambrick and Mason 1984) therefore they are able to make strategic decisions. Focusing on the middle management is also consistent with the previous studies as it was demonstrated that there is an increasing role of middle managers in fostering entrepreneurial efforts (Al-Amoush et al. 2021, Eren and Kocapinar 2009). The data for this research were collected through a survey administered to members of top and middle management teams from a random sample B2B firms across a diverse range of industries in Turkey. The respondents represented a diverse range of firm sizes and industries.

Following the previous research, this study implemented the same approach and data was collected from top and middle management members of B2B firms in Turkey. The focus of this study is emerging markets and Turkey is an emerging market (IMF 2018) with a growing economy listed as 7.4% growth rate in 2017 (CIA 2019). Majority of the previous studies on

social CRM have been conducted in developed countries (Harrigan et al. 2020; Kim and Wang 2019; Wang and Kim 2017; Trainor et al. 2014; Choudhury and Harrigan 2014; Rapp et al. 2010) and it had been identified that it is critical to explore social CRM capabilities in different countries, regions, and industries to gain in depth knowledge (Pour and Hosseinzadeh 2020).

Furthermore, the focus of this study is only B2B firms and an emerging market, Turkey. This is because majority of the previous studies on social CRM had been conducted in developed markets (Harrigan et al. 2020; Kim and Wang 2019; Wang and Kim 2017; Trainor et al. 2014). Also, previous literature found differences between B2B and B2C firms and their ability to utilise social CRM capabilities (Trainor et al. 2014) and therefore this study focuses particularly on the B2B firms to gain more in-depth knowledge and to further the understanding of social CRM capabilities. Additionally, as discussed in previous chapters, there is a need to expand knowledge on social CRM in emerging markets because there is an increase in the use of social media by B2B firms, and although some firms have implemented this for CRM purposes, there is still a lack of knowledge on how these firms can effectively utilise social CRM.

#### 4.6.1 Sample Size

Sample size is crucial as this influences the ability of analysis to provide accurate results. Ensuring sufficient sample size is a critical consideration in study design (Tabachnick et al. 2013) as having adequate statistical power is one of the key factors for observing accurate relationships within the dataset (Wolf et al. 2013). This study utilises structural equation modeling for data analysis. For structural equation modeling, the minimum sample size depends on the complexity of the proposed model (Hair et al. 2010). For the current study, the total sample size is 217. Thus, considering the complexity of this study's model, the sample size is considered to be sufficient for the statistical power to examine the relationships between variables and testing hypotheses. This is also consistent with previous firm-level studies (e.g. Agnihotri et al. 2016; Siamagka et al. 2015; Trainor et al. 2014).

#### 4.6.2 Exclusion criteria

For this study data was collected from a third-party company (see 4.6). As a result, sample from a panel of participants, who are motivated by receiving rewards, panel will consist of many different types of participants. Accordingly, the following reflects the exclusion criteria for the present study; 1) participant should be a member of top or middle management of the firm, 2) the firm that participant works at must be in the B2B context.

As discussed above, these criteria are chosen in-part due to the context of this study. Regarding the first criteria, this study investigates the role of entrepreneurial orientation on social CRM capabilities. Thus, participants should have the sufficient knowledge to answer the questions adequately. As discussed above, top, and middle management members of the firms are the appropriate the sample for this and this is in line with the previous studies. In relation to the second criteria, the context of this study focuses on the B2B firms only. As discussed previously, social media is becoming increasingly used within the B2B context (Kumar and Sharma 2022). However, current literature on social media is mainly focused on the B2C context. Considering that B2C and B2B firms have significant differences in regard to their operational and contextual characteristics (i.e., Baabdullah et al. 2021; Iankova et al. 2019; Trainor et al. 2014), there is a need to further investigate the strategic use of social media in the B2B context (Cartwright et al. 2021), by extension social CRM. Following these discussions, participants that were not members of top and middle management in the B2B context, were eliminated from the dataset.

## **4.7** Method of administration (third party company)

The next methodological consideration is the research instruments. As discussed above, the chosen method for the present study is surveys. The other potential methods include interactive, communication, non-interactive, and observation (Iacobucci and Churchill 2010). However, as the nature of the variables are not appropriate for non-interactive and observation methods, only the interactive and communications methods were considered. There are four main ways to collect data via the interactive and communications methods. These are in-person or online

interviews, mail questionnaire, telephone interviews, or the internet-based surveys (Dillman 2011). Due to the nature of this research, interviews were not appropriate as these types of data collection methods are more resource intensive. Also, considering the length of the questionnaire and all the variables to be tested, both interviews and transcription would have required long hours (Iacobucci and Churchill 2010).

Furthermore, the use of mail surveys was not feasible as firstly the mail surveys may not be anonymous which might have negatively affected respondents' answers. Secondly, for this study, data was collected in Turkey. Therefore, mail surveys would have been difficult to control due to the time and cost efficiency. Finally, mail surveys require some effort from the respondents as the questionnaires must be returned via post to the researcher which might have caused a low response rate or non-response bias (Sax et al. 2003). Non-response can happen by two processes: (1) not being able to reach the potential respondent and (2) declined survey participation (Hulland et al. 2018). To minimise the non-response issues, online surveys is the most appropriate option for this study. Evidence suggests that the respondents are more likely to be open and available for online surveys (Hulland et al. 2018), whilst the non-response can happen due to the result of respondent's refusal rather than an inability to reach potential respondents (Hulland et al. 2018; Weisberg 2009; Curtin et al. 2005).

Online surveys are a growing method on survey research. At the beginning of the 21<sup>st</sup> century, response rates were higher for mail surveys than online surveys (Crawford et al. 2001). However, with the evolvements in technology, individuals are now more connected to the internet via various devices such as tablets or mobile phones which allows them to be online at any time. Accordingly, the response rates for online surveys have been increasing as well as delivering higher quality data (Gill et al. 2013; Barrios et al. 2011).

Moreover, benefits of online surveys also include quicker turnaround time, cost efficiency, and high convenience. These allow researchers to collect data quicker, enhance the response rates, and determine the quality of the data. In addition, to increase the convenience for the respondents, online surveys allow respondents to complete the survey on their smartphones.

This study focuses on only B2B firms. Evidence suggests that accessing B2B firms can be difficult (Wilson and Bettis-Outland 2020). Thus, B2B marketing researchers have to deal with smaller sample sizes (Gentry and Hailey 1981), and the response rate tend to be lower in B2B research in comparison to B2C research (Srinivasan 2012; Rindfleisch and Antia 2012).

Additionally, there is an accepted weak bond between the research in B2B marketing and the industry which makes the data collection process more complex in comparison to the consumer context (Cortez and Johnston 2017). Finally, some B2B firms may have restrictive policies which may prevent them sharing information on management, operations, sales and marketing strategy (Cortez and Johnston 2017).

Following the discussion above, for this study, a third-party data collection company was utilised. Although the initial aim was to researcher to collect data via network, and social media channels, due to the low response rate, and the challenges faced in regard to communication, involving a third-party company was the only option to collect data in a timely manner. The use of third-party companies and online data panels has been increasing. However, there are also some limitations. For instance, most data collection companies offer incentives to the respondents. This may result having demographically different population which may cause issues in the representation of the entire sample (Johnston 2016).

There are several global data collection companies or online data panels such as Qualtrics. However, due to the context of this study, the data collection company was chosen for this study is based in Turkey. This is because as one of the inclusion criteria for this study is B2B firms in Turkey, global data companies were not able to complete the data collection in a short time and they were not cost efficient. The chosen company was recommended from another academic (professor) in Turkey. Researcher contacted with the company, and once the process was explained, researcher was made sure that the quality of the data, and the exclusion criteria would be the priority for the data company. Initial price was £1500, however due to the population (B2B firms top and middle management members), the price was increased to £2000. This was because of the difficulty of accessing to the correct population. Once the questionnaire was designed, it was translated to Turkish by a notary approved translators, and it was checked by two academics and a practitioner in a B2B firm in Turkey. Questionnaire designed is discussed in the next section.

## 4.8 Questionnaire Design

Questionnaire design is a focal point for any quantitative study. In order to achieve the research objectives, and test hypotheses, researchers must have a deep understanding of the research area, and the research questions to be addressed in the study (Ticehurst and Veal 2000). For the present study, relevant variables and the proposed relationships were discussed in Chapter 3, in which the conceptual model and hypotheses were presented. Based on these discussions, questionnaire was developed for the data collection phase. Adapting a step-by-step guide, the process of the questionnaire design is discussed in this section.

### 4.8.1 Operationalisation of Constructs

Operationalisation of constructs, in other words, operationalisation of the variables that are observed, is identifying the appropriate measurement instruments. Researchers must decide whether the existing scales can be used for the study in the same format or the adaptation of the scales to fit to the research context is required or not. Although one of these options are appropriate for most of the studies, developing new scales may be required for some studies depending on the research context (Page and Meyer 2000). In order to make a choice, researcher reviewed the existing literature to gain an in-depth knowledge on the measures and available scales. It was concluded that variables can be effectively measured by utilising the existing scales. Existing scales were adapted in this study, and the measurement scales are presented in the following section.

### 4.8.1.1 Social CRM Capabilities

Social CRM capabilities is measured by using multi-item scales adapted from Trainor et al. (2014). The scale was originally used by Srinivasan and Moorman (2005) which represented acquiring, dissemination, and responding to customer information in an organisation. These three latent factors were assessed using the multi-item scales. The scales were adapted to

explicitly refer to customer information that are generated from social media applications (Trainor et al. 2014). Within the multi-item scale, there were three items were used to measure *information generation*, four items were used to measure *information dissemination*, and six items were used to measure *responsiveness*. 7-point Likert scale was used and the scale ranges from  $l=strongly\ disagree\ to\ 7=strongly\ agree$ . The three subdimensions were then combined to create the measure of social CRM capabilities (Trainor et al. 2014).

Table 1 Measure of social CRM capabilities

### **Information Generation**

In our firm...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
We use social media to conduct market research.	0	0	0	0	0	0	0
We use social media to detect changes in our customers' product preferences	0	0	0	0	0	0	0
We use social media to detect fundamental shifts in our industry (e.g., competition)	0	0	0	0	0	0	0

# Table 2 Measure of social CRM capabilities

## **Information Dissemination**

In our firm...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
We have frequent interdepartmental meetings to discuss market trends identified via social media.	0	0	0	0	0	0	0
Marketing personnel spend time discussing customers' future needs identified on social media applications with other departments.	0	0	0	0	0	0	0
Data collected using social media on customer satisfaction are disseminated at all levels on a regular basis.	0	0	0	0	0	0	0
When one department finds out something important about competitors using social media, it is quick to alert other departments.	0	0	0	0	0	0	0

# Table 3 Measure of social CRM capabilities

## Responsiveness

In our firm...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
We use social media to respond to our competitor's price changes.	0	0	0	0	0	0	0
We pay attention to changes in our customers' products or service needs using social media.	0	0	0	0	0	0	0
If a major competitor launched an intensive campaign targeting our customers, we would respond immediately using social media.	0	0	0	0	0	0	0
The social media activities of the different departments are well coordinated.	0	0	0	0	0	0	0
Customer complaints can be filed and tracked using social media in our firm.	0	0	0	0	0	0	0
When our customers want us to modify a product or service, we announce that change using social media.	0	0	0	0	0	0	0

### 4.8.1.2 Entrepreneurial Orientation

Following previous studies (e.g., Ciampi et al. 2021; Saha et al. 2017; Boso et al. 2013; Li et al. 2009), entrepreneurial orientation was conceptualised and measured via five dimensions, which are innovativeness, risk-taking, proactiveness, aggressiveness, and autonomy. Innovativeness demonstrates firms' openness to adopt new technologies and support the implementation of new products and services. Risk-taking refers to taking courageous actions such as investing in high-risk project or venturing into unfamiliar new markets. Proactiveness is firm's behaviour in seizing initiatives and acting opportunistic when possibilities occur. Aggressiveness demonstrates firm's response to their competitors in the current marketplace. Finally, autonomy refers to the independency of individuals within the firm, in other words, it is individual's independent actions towards the goals, and business concepts. Innovativeness was measured using five items, risk-taking, proactiveness, aggressiveness, and autonomy were measured using three items. This is consistent with the previous studies (e.g., Ciampi et al. 2021; Saha et al. 2017; Boso et al. 2013; Li et al. 2009). For all the dimensions, 7-point Likert scale was used and the scale ranges from *1=strongly disagree to 7=strongly agree*.

**Table 4 Measure of innovativeness** 

Please indicate the degree to which you agree with the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Our company is known as an innovator among businesses in our industry.	0	0	0	0	0	0	0
We promote new, innovative product/services in our company.	0	0	0	0	0	0	0
Our company provides leadership in developing new products/services.	0	0	0	0	0	0	0
Our company is constantly experimenting with new products/services.	0	0	0	0	0	0	0
We have built a reputation for being the best in our industry to develop new methods and technologies.	0	0	0	0	0	0	0

## Table 5 Measure of risk-taking

Please indicate the degree to which you agree with the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Top managers of our company, in general, tend to invest in high-risk projects.	0	0	0	0	0	0	0
This company shows a great deal of tolerance for high risk projects.	0	0	0	0	0	0	0
Our business strategy is characterized by a strong tendency to take risks.	0	0	0	0	0	0	0

## **Table 6 Measure of proactiveness**

Please indicate the degree to which you agree with the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
We seek to exploit anticipated changes in our target market ahead of our rivals.	0	0	0	0	0	0	0
We seize initiatives whenever possible in our target market operations.	0	0	0	0	0	0	0
We act opportunistically to shape the business environment in which we operate.	0	0	0	0	0	0	0

# **Table 7 Measure of aggressiveness**

Please indicate the degree to which you agree with the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
We typically adopt an "undo-the- competitor" posture in our target markets.	0	0	0	0	0	0	0
We take hostile steps to achieve competitive goals in our target markets.	0	0	0	0	0	0	0
Our actions toward competitors can be termed as aggressive.	0	0	0	0	0	0	0

## **Table 8 Measure of autonomy**

Please indicate the degree to which you agree with the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Personnel behave autonomously in our business operations.	0	0	0	0	0	0	0
Personnel act independently to carry out their business ideas through to completion.	0	0	0	0	0	0	0
Personnel are self-directed in pursuit of target market opportunities.	0	0	0	0	0	0	0

## 4.8.1.3 Customer-centric Management Systems

Customer-centric management systems scale was adapted from Jayachandran et al. (2005) and was also used in Trainor et al. (2014). This scale demonstrates firm's ability to build and maintain customer relationships via the structures and incentives (Day 2000). Additionally, the scale measures the degree to which customers are the central focus of the firms. Six items were measured using 7-point Likert and the scale ranges from  $I=strongly\ disagree\ to$   $7=strongly\ agree$ .

Table 9 Measure of customer-centric management systems

Please indicate the degree to which you agree with the following statements. In our firm...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
We focus on customer needs while designing business processes.	0	0	0	0	0	0	0
Employees receive incentives based on customer satisfaction measures.	0	0	0	0	0	0	0
A key criterion used to evaluate our customer contact employees is the quality of their customer relationships.	0	0	0	0	0	0	0
Business processes are designed to enhance the quality of customer interactions.	0	0	0	0	0	0	0
We organize our company around customer- based groups rather than product or function- based groups.	0	0	0	0	0	0	0
Various functional areas coordinate their activities to enhance the quality of customer experience.	0	0	0	0	0	0	0

#### 4.8.1.4 Firm Performance

The dependent variable *firm performance* scale was adapted from Foltean et al. (2019), which was originally adapted from the scaled developed by Moorman and Rust (1999). This scale demonstrates firm's performance against their competitors for the past three years averaging

over the last three years, measuring the market share growth, sales growth, and profitability growth. Three items were measured using 7-point Likert scale and the scale ranges from I= much worse to 7 =much better (Moorman and Rust 1999). Much worse represents the most negative evaluation, moderately worse indicates a moderately negative evaluation, slightly worse shows a mild negative evaluation where the respondents perceive the subject to be slightly worse but not significantly whereas slightly better represents a mild positive evaluation, moderately better indicates moderately positive result, and finally much better shows the most positive evaluation. Although the scale itself is an objective measure, it was not possible to collect objective data from private firms. Therefore, following previous studies (i.e. Al-Surmi et al. 2020, Folten et al. 2019, Li et al. 2009), the scale is treated as a subjective and reflective measure using 7-point Likert scale type as the latent construct causes the observed measures.

**Table 10 Measure of firm performance** 

Compared to your competitors, how well did you perform over the past 3 years?

	Much worse	Moderately worse	Slightly worse	About the same	Slightly better	Moderately better	Much better
Market share growth	0	0	0	0	0	0	0
Sales growth	0	0	0	0	0	0	0
Profitability growth	0	0	0	0	0	0	0

#### 4.8.1.5 Control Variables

In any research project, it is crucial to account for external variables that could affect the hypothesised relationships. In line with the standard practice in marketing research, the current study included several control variables.

Firstly, technology resources have been demonstrated to influence marketing capabilities. In line with the RBV theory, one resource or capability should be reinforced to impact another capability, which has been argued to have enhancing effects on the relationships between resources and outcomes (Teece et al. 1997). In the marketing literature, empirical evidence has been highlighted the interactive effects between technology and marketing sources (Song et al. 2005). Additionally, it has been found that CRM technology resources have a positive effect with a complementary organisational capability (Rapp et al. 2010) such as social CRM capabilities. Other researchers have highlighted that technology resources alone are not sufficient enough to provide enhanced performance (Chang et al. 2010; Borges et al. 2009; Coltman 2007; Melville et al. 2004; Bharadwaj 2000). This means that technology resources should be incorporated with customer-centric processes and human skills to develop beneficial capabilities (Trainor 2012; Coltman 2007). In addition, technology resources can differ in every firm, which can affect social CRM capabilities. Thus, it is likely that firms that equipped with higher levels of technology resources, will also have higher levels of social CRM capabilities and enhanced firm performance.

Technology resources scale was adapted from Rapp et al. (2010) and measured with six items using 7-point Likert scale and the scale ranges from I=strongly disagree to 7=strongly agree.

Furthermore, this study also controls for firm size. Larger firms typically have more resources to allocate towards social CRM initiatives. This can include financial investments in advanced technology, hiring specialised staff, and comprehensive training programs. These resources can enhance the effectiveness of social CRM capabilities (Trainor et al. 2014). Additionally, larger firms may have more capacity to take risks, allowing them to experiment with innovative social CRM tools. This can lead to the development of cutting-edge approaches and tools in customer relationship management (Agarwal and Weill 2012). However, as firm size increases, the complexity of internal coordination can also be more difficult. Larger firms may face challenges in integrating social CRM across various departments and ensuring consistent customer experiences. This requires robust internal communication and management systems (Greenberg 2010). On the other hand, smaller firms might be more agile and adaptable in implementing and adjusting their social CRM strategies. This flexibility can be beneficial in rapidly changing marketing conditions and emerging social media trends (Malthouse et al. 2013).

*Firm size* was measured based on the number of employees within the firm. The multiple-choice question had four options to choose from, which determined whether the firm is micro (less than 10), small (10 to 49), medium (50 to 249) or large (250+).

Finally, this study also controlled for firms' experience in using social media by asking how long they have been using social media for business purposes. Social media platforms are constantly evolving. It is likely that firms that have been using social media for a longer period of time are usually better equipped to adapt to these changes and incorporate new features into their CRM strategies.

Experience was measured based on the duration of using social media within the firm. The multiple-choice question had six options to choose from, first one being 'we do not'. Participants that chose the first option were automatically eliminated from the dataset as to have social CRM capabilities; firms must be utilising with social media.

### 4.8.2 Physical Questionnaire Design

The physical design of the data collection instrument is a critical stage and vital for securing the acquisition of high-quality data. The following sections discuss the design considerations, structure, as well as other characteristics of the current study.

#### 4.8.2.1 General Design Considerations

While there is no single set of procedures universally adopted, several key guidelines are suggested for creating a high-quality and optimal questionnaire (Dillman 2011). Structuring the questionnaire in a coherent way, maintaining a reasonable length, sequencing questions to enhance followability, and ensuring a professional look call all contribute to higher survey completion rates (Iacobucci and Churchill 2010; Lee and Lings 2008). In addition, it has been advised to positioning more challenging questions towards the end of the survey and putting the main research variables near the beginning, while ensuring logical progression (Sudman et al. 1996). Lastly, the questionnaire should have professional look to reflect its academic purpose, with careful consideration given to the physical presentation, including layout, text size, and typography (Fan and Yan 2010). For the current study, the length was not a significant concern. The questionnaire is designed to be completed in approximately fifteen minutes.

Additionally, the type of responses was strategically chosen to minimise potential bias; this is elaborated in the following sections.

#### 4.8.2.2 Response Forms

All the variables examined in this study are firm-level and as discussed, the sample for this study was middle and top management members. Although the subjectivity was not a concern as much as it would be on a personal-level questionnaires, this was still considered when designing the questionnaire and form of responses. Questionnaire included various types of question formats such as Likert scales, sliding scales and multiple-choice questions. Using close-ended questions tend to decrease the time required for respondents to complete the survey, thus increasing the likelihood of questionnaire completion, which results in a bigger dataset for researchers to work with.

For the current study, most of the questions adopted close-ended formats, with 7-point Likert-type scales being the predominant choice, ranging from 1-strongly disagree to 7-strongly agree. This particular format is widely recognised and applied across various studies in the literature, and it aligns with the established measures that are incorporated into this research (e.g., Wang and Netemeyer 2002; Vandewalle et al. 1999). Additionally, not all measures can be measured with a strongly disagree to strongly agree scales and requires different anchors. For instance, the firm performance was measured ranging from 1-much worse to 7-much better. Finally, multiple-choice question format was utilised to collect demographic data, including the firm size, industry, social media use within the firm.

## 4.8.2.3 Questionnaire Structure

As discussed above, the questionnaire was divided into logical sections to mitigate the risk of respondents developing common method biases due to monotony, as well as to avoid the concern of straight-lining, where respondents choose the same response option without consideration. The first section comprises three questions concerning eligibility criteria. The

survey starts with a clear explanation of the exclusion criteria, providing respondents with an overview of the study's structure and ensure their willingness and ability to participate throughout its duration. Additionally, as this study focuses on Turkey only, the firms should be considered as Turkish firms, thus respondents were asked whether their firm is considered to be Turkish firm or not. Secondly, the main role of the respondent should be top and middle management member, and the firm must operate in the B2B context. Any respondents that did not in this criterion were automatically removed from the dataset.

Once the respondents were identified as required for this study, they could move to the second section, which included demographic information. These questions mainly included information about the firm demographics such as the firm size, industry, firm's use of social media. These set of questions served as the initial set of questions as they did not entail any identifiable and sensitive information and demand minimal cognitive effort from the respondent. Subsequent to that, section three included the variables that this study examines. These started with technology resource, followed by social CRM capabilities, customer-centric management systems, firm performance, and ended with the entrepreneurial orientation questions. In total, the questionnaire included thirty-five questions, involving the exclusion criteria and marker variable questions. To help respondents in filling out the questionnaire, an introductory note was provided on the first page, outlining the purpose of the study, the rationale behind the research and the contact details of the researcher and supervisors.

## 4.8.2.4 Look and Feel of Questionnaire

The questionnaire was designed using Qualtrics software and transferred to Google Forms for the data collection. These software's offer a range in-built tool to facilitate questionnaire design. Ensuring that the questionnaire is user-friendly is crucial to, as complexity can adversely affect completion rates. Respondents were required to answer all questions on a page before progressing, and for questions that could be potentially challenging, error messages were displayed to clarify any mistakes. The design of the survey was intentionally straightforward to minimise distractions and cognitive load for respondents. The importance of the questionnaire's visual layout to hold the respondent's attention was also considered (Brace

and Bolton 2022). Once a page was completed, respondents could not return to it, a decision made to avoid modifications to earlier answers based on subsequent questions, while the use of multiple pages served to eliminate the need for excessive scrolling. In addition, all questions were tested to ensure they were easily viewable on a mobile device or on a tablet, considering that top and middle management members might opt to complete the survey on such devices.

#### 4.8.2.5 Pre-Testing

Previous studies have highlighted the importance of pre-testing before the data collection commences as it produces vital insights for the researcher about various facets of the questionnaire (e.g., Iacobucci and Churchill 2010; Dillman 2007). It has been emphasised that scrutinising both the content and wording are crucial (Kolb 2008) as it is vital that participants interpret the questions exactly as the researchers intend. In this study, pre-testing is carried out to assess the measurement instrument's functionality and identify any potential issues that respondents might face while completing the questionnaire, and to gather information on the duration of the survey and its overall user experience including the ease of navigation. Additionally, pre-testing helped researcher to evaluate the changes in dynamic constructs as well as gauging potential dropout rates. The pre-test phase of this research is divided into three primary segments: reviews of academics, reviews of practitioners, and a preliminary pilot test. The next sections discuss each step of the pre-test procedure.

### 4.8.2.5.1 Review by Academics

The initial step in the pre-testing process is recommended to be a peer reviewer process, which is instrumental in confirming the face validity of the questionnaire (Dillman 2011). Face validity concerns whether the items on a scale are a true reflection of the construct's theoretical scope and should be established before testing theoretical models to ensure accurate measurement model specification (Holden 2010). This aspect of validity is crucial, irrespective of whether the items are adopted from pre-existing scales or are newly created. For this study,

peer-review was conducted with four academics in marketing, who offered essential critiques on the questionnaire format and the specific items it included, particularly the terminology and structure. Based on the feedback provided, some adjustments have been made. For instance, to make it easier for the respondents to follow, wording of some items has been altered as well as the position of some questions have been changed to accomplish a better flow.

#### 4.8.2.5.2 Review by B2B Practitioners

Following the revisions made in response to peer-review feedback, focus was shifted to B2B practitioners. This stage can also be considered as conducting protocol interviews, a process in which the researcher observes participants as they complete the questionnaire and gathers feedback to achieve expert validation (Artino Jr et al. 2014). This step acts as an initial trial of the questionnaire on a target respondent for the current study, offering substantial benefits in pinpointing any main problems with the questionnaire or specific concerns with individual items. For the current study, four B2B practitioners were employed, two from the United Kingdom and two from Turkey. The reason for this was to firstly ensure that the quality of the questionnaire, which the practitioners from the United Kingdom identified some minor issues such as the structure of the questions. Once these were addressed, as discussed above, questionnaire was translated into Turkish by the notary approved translators. To ensure the translations and quality of the questionnaire, two B2B practitioners from Turkey were employed, which they only identified minor terminology and spelling issues. Given that only minor concerns were highlighted, these were firstly addressed, and the pre-test progressed to the concluding phase, which is a pilot study employing the intended method of administration. This is elaborated in the subsequent section.

### 4.8.7.2.5.3 Pilot Study

The last phase of pre-testing involves conducting a focused pilot study. It has been suggested that the carrying out a pilot study is beneficial to evaluate the efficacy of research instruments

(Bryman 2012). This critical step helps to determine if the measurement instrument is functioning correctly. Additionally, a pilot study helps in refining the questionnaire to secure precise and dependable data (Easterby-Smith et al. 2015). Pilot tests have also been suggested to confirm that questions are suitably reaching all intended respondent sample rather than a select few, to anticipate the type of response rate achievable, to spot items that may lead to a high rate of nonresponse, and to understand how respondents are answering (Dillman 2007).

In line with these suggestions, a pilot study was carried out with 91 participants prior to the commencement of the main data collection phase. The pilot study was originally distributed to 100 individuals, however after reviewing the responses, it was concluded that only 91 of them were suitable for analysis. Nine respondents were excluded due to their responses showing a pattern of straight-lining, indicating a lack of engagement with the questions. To minimise this issue for the main data collection, an attention check question was added, which determined the focus of the respondents. The question 'Please select strongly agree from the below options' was included, and the respondents that did not answer correctly were eliminated from the dataset.

### **4.8.2.6 Main Study**

Utilising third-party companies for data collection has gained popularity among researchers. This study collected high-data from a registered third-party company, with the final sample size of 217. A limitation of using such a service, however, is the challenge in conducting non-response bias tests (Armstrong and Overton 1977). Nevertheless, the researcher received assurance from other academics with prior experience using this service, attesting to the credibility of the data previously obtained from the company.

#### 4.8.2.6.1 Cover Letter

At the beginning of the questionnaire in the Google Forms, a welcoming message was provided, introducing survey participants to the study (Appendix 1). It outlined the purpose of

the research to encourage their comfortable participation, and it guaranteed full confidentiality and anonymity for the data provided. The research team and the data collection company concurred that every possible measure had been taken to optimise the study's chances of success. Additionally, Participant Information Sheet guidelines and policies were included and were followed to ensure the anonymity and confidentiality of the respondents.

#### **4.8.2.6.2** *Response Rates*

As discussed above, the pilot study has provided some valuable insights on the response rates. For the main study, a total of 246 responses were obtained, however 29 were deleted as there was obvious signs of participants being speeders or straight-lining. Some responses were also removed due to failing the attention test, and the informant ability questions. This question asked participants whether they are knowledgeable to answer the questions within the survey, and the respondents that did not agree or strongly agree were eliminated from the dataset. At the end, leaving the current study with 217 useable responses.

### 4.8.2.6.3 Response Bias

Achieving generalisability is a key goal in academic research, requiring that the sample reflects the target population (Mann 2003). Non-response bias is a critical factor to consider, as failing to address those who do not respond introduces a potential sample bias (Sheikh and Mattingly 1981). Ideally, researchers would analyse the bias, but in the case of this study, the data collection method, being done by the third-party company via online surveys- precludes the examination of non-response bias. This represents a limitation within the research design of this study. However, it has been recommended that that a healthy and acceptable response rate ranges from 6% to 16% (El Baz and Ruel 2021). The current study obtained a total of 217 acceptable responses from a sample of 246, which results in a non- response rate of 12%. Therefore, the current study meets the acceptable response rate as recommended by academics. Common method bias is extensively discussed in Chapter 6, Analysis.

#### 4.9 Ethical Considerations

The current study was conducted in compliance with the research ethical standards set by Bournemouth University. Researcher has got approved Ethics Form by the University by completing the relevant forms (Ethics form and participant information sheet), and the ethics form included information about the data collection method, and the use of the third-party company, which was deemed safe to be used.

There are four main fundamental ethical principles to adhere in research, which are full disclosure, voluntary participation, informed consent and ensuring no harm or risk to participants (McMillan and Schumacher 2014). The authors advocate for the necessity of fully informing participants about all aspects of the research. Generally, revealing the purpose of the study is essential. For this research, Participant Information Sheet was provided for every participant, detailing the aim and objectives of the study. For an activity to be considered voluntary, participants must be free from any pressure, or any sense of obligation. For the current study, the survey was presented as a voluntary option by the third-party data collection company. Furthermore, informed consent involves thoroughly explaining the research to participants, allowing them the freedom to opt out without negative implications, and making participants aware of any risks involved. For this study, there were no risks for the participants and all participants signify their understanding and agreement to partake in the study by stating their agreement on the questionnaire's introductory statements which have respondents the choice to partake in the survey voluntarily. For the confidentiality, identifiable information such as respondent's name or the firm name have not been collected from the participants. All the collected data have been stored in a password protected file on researcher's personal laptop, with no access to anyone else.

## 4.10 Chapter Summary

This chapter focussed on four main objectives; firstly, to offering a rationale for the chosen research design, secondly discussing the chosen method of administration, namely surveys, thirdly defining and elaborating the chosen sample frame, and lastly detailing the strategies implemented to minimise survey biases. Opting for a cross-sectional research design, the study utilised online surveys as the most practical and suitable method of data collection, offering participants flexibility and adaptability. The sample chosen for this consists of top and middle management members of the B2B firms, who are key to implementing new technologies and are expected to show variability in this study's key variables of interest. While the current study was unable to carry out a response bias evaluation, as recommended by previous studies, the response rate was 12%, which is considered acceptable. Additionally, measures were implemented to mitigate the potential impact of common method bias on the study's findings. These are detailed in Chapter 6 (see section 6.9). In the following chapter, the study presents the demographic profiles of the B2B firms, as well as outlining the approach for the scale development, and discusses the validity and internal consistency.

## **CHAPTER 5: DESCRIPTIVE ANALYSIS**

## **5.1 Chapter Introduction**

This chapter has three primary objectives; firstly, it aims to offer a descriptive analysis of the study's sample, secondly outline the rationale behind the developing the scales used in testing this study's hypothesis, and lastly present the outcomes of the measure development process. The descriptive analysis shows the characteristics of the sample used, while the scale development strategy will clarify the study's approach in interpreting response patterns within the applied measures. Additionally, this chapter provides the underlying premises of the chosen analysis techniques, structural equation modelling, and the analysis method, maximum likelihood. The chapter also discusses the exploratory factor analysis as well as the confirmation factor analysis as well as providing the factor loadings and fit indices. This is followed by the discriminant validity analysis, and descriptive statistics.

## **5.2 Sample Descriptive**

This section provides an overview of the demographics of the B2B firms that participated in the present study. It is crucial to understand the respondents that are involved as this helps researcher to determine whether the demographics of the sample are appropriate for the study. B2B firms can differ in many aspects such as the firm size, annual turnover, industry, and their use of social media applications. Thus, it is important to ensure the characteristics of the firms are conform to the selection criteria and therefore the sample is appropriate to achieve the aim. The first two measures show the respondent's demographics, followed by the firm demographics.

## 5.3 Respondent's role in the firm

Table 11 Respondent's role

#### POSITION IN THE FIRM

	Frequency	Percent	Cumulative Percent
Owner/CEO/Shareholder	48	22.0	22.1
General Manager	49	22.5	44.7
Marketing Manager	61	28.0	72.8
IT Manager	38	17.4	90.3
Other Managerial Positions	21	9.6	100.0

Table 11 demonstrates the respondent's position in the firm. As discussed in Chapter 3 following the previous studies, this study only considered top and middle management members as part of the sample. This decision is based on the previous literature as top and middle management members are considered to be decision-makers of the firm in which they can decide to implement new technologies or systems. Although the table shows that there is a wide range in the distribution, unsurprisingly marketing managers are the highest respondents within this sample.

## 5.4 Respondent's experience in current role

Table 12 Respondent's experience in the current firm

EXPERIENCE

	Frequency	Percent	Cumulative Percent
Less than 1 year	39	17.9	18.0
1-3 years	58	26.6	44.7
3-5 years	34	15.6	60.4
5-10 years	46	21.1	81.6
10+ years	40	18.3	100.0

Table 12 demonstrates the respondent's experience in the current firm that they are working at. Distribution shows that there is a wide range of experience in regard to the duration of the respondent in the current firm. It should be noted that this measurement does not reflect on the

respondent's overall career experience, it only sheds light on the individual's experience at their current firm.

## 5.5 Firm age

## Table 13 Firm age

FIRM AGE

	Frequency	Percent	Cumulative Percent
Less than 1 year	3	1.4	1.4
1-3 years	9	4.1	5.5
3-5 years	15	6.9	12.4
5-10 years	32	14.7	27.2
10+ years	158	72.5	100.0

Table 13 shows the distribution of the firm age within the current sample, in other words it reflects how long the firm has been operating. It is evident that the majority of the sample (72.5%) has been operating for ten years or more.

#### 5.6 Firm Size

**Table 14 Firm size** 

FIRM SIZE (number of employees)

	Frequency	Percent	Cumulative Percent
Less than 10	7	3.2	3.2
10-49	57	26.1	29.5
50-250	63	28.9	58.5
250+	90	41.3	100.0

As it can be seen from the Table 14, 41.3% of the responses came from large firms in comparison to small and medium enterprises. This is in line with the previous studies (e.g., Trainor et al. 2014) as it was demonstrated that the average fir size was between 100 and 500

employees. As discussed in Chapter 4, firm size was measured on the employee size, which reflects whether the firm is micro, small, medium, and large.

## **5.7 Industry**

## **Table 15 Industry**

INDUSTRY

	Frequency	Percent	Cumulative Percent
Logistics	41	18.8	18.9
Investment Banking	33	15.1	34.1
Wholesale Textile	36	16.5	50.7
Automative	26	11.9	62.7
Fast-moving Consumer Goods	58	26.6	89.4
Manufacturing	17	7.8	97.2
Insurance (B2B)	6	2.8	100.0

Following the previous studies (Trainor et al. 2014), this current study considered all B2B industries in the sample. As the Table 15 demonstrates, there was a wide array of B2B industries with fast-moving consumer goods was the highest with 26.6%.

### **5.8 Annual Turnover**

**Table 16 Annual turnover** 

ANNUAL TURNOVER

	Frequency	Percent	Cumulative Percent
Under 1 million TL	8	3.7	3.7
1-5 million TL	30	13.8	17.5
5-10 million TL	21	9.6	27.2
10-20 million TL	26	11.9	39.2
20-30 million TL	21	9.6	48.8
30-40 million TL	12	5.5	54.4
40-50 million TL	26	11.9	66.4
50+million TL	73	33.5	100.0

TL= Turkish Liva (corrency in Turkey)

Table 16 demonstrates the annual turnover of the firms. Although the table shows that there is a wide range in the distribution, unsurprisingly the highest percentage is 50+million with 33.5%, this can be due to the sample as it was shown majority of the sample is large firms.

## 5.9 Social media use of the firm (experience in years)

Table 17 Social media experience within the firm

SOCIAL MEDIA USE OF THE FIRM

	Frequency	Percent	Cumulative Percent
Less than 1 year	46	21.1	21.2
1-3 years	55	25.2	46.5
3-5 years	58	26.6	73.3
5-10 years	54	24.8	98.2
10+ years	4	1.8	100.0

Lastly, as it can be seen from the Table 17, respondents were asked how long they have been using social media channels within the firm. It is not surprising that 10+years were low as social media has become efficient for firms only recently. As the table demonstrates, the majority of the firms have been using social media for 3-5 years followed by 1-3 years. It is significant to understand the firm's experience on the use of social media as it may affect their social CRM capabilities (i.e., some firms have not been using social media for a long time and therefore they may not have capability to utilise social CRM).

## 5.10 Summary of Sample Appropriateness

As discussed, and presented above, this current study shows similar demographics to previous social CRM research. This study only considers B2B firms, and to make sure the sample represents this, respondents were asked whether the firm they work at is B2B or not, and as discussed in Chapter 4 as a result some responses were eliminated from the sample as the firms were not B2B. The other important point that the respondents were asked whether they use social media for business purposes within the firm, and again there were some responses that

were removed from the sample as they did not use social media. In addition, respondents were also asked whether their firm is Turkish or not, and again some responses were removed due to the firm's nationality. Lastly, it was crucial that the respondents were at middle or top management roles. The sample shows that this criterion has been met. To conclude, the sample is consistent with the previous studies (e.g., Harrigan et al. 2020; Trainor et al. 2014), which indicates that the sample is appropriate to generalise to the wider B2B firms' population.

## **5.11 Analysing Existing Multi-Item Measures**

In any research, researchers should make sure that the constructs are effectively measuring what they supposed to measure. This step is important and crucial before any hypothesis is tested as it allows researchers to evaluate the measures and if necessary, remove items. For the current study, all constructs were employed existing items with the most scales were taken from a single source (please see Chapter 3). Majority of the response formats within the current measures is a 7-point Likert scale, from 'strongly disagree' to 'strongly agree'. This only differs for the control variables (i.e., firm size), where the response formats were multiple-choice questions with the use of single item measures.

This following section exhibits the results from an analysis of the existing measures. The aim of these analysis is to ensure all the existing items measure what they are supposed to measure and validate that the items taken from previous studies. All items used were from scales measuring the specific construct, and all measures were published in established sources. For the process of examining each scale, exploratory factor analysis (EFA) followed by a confirmatory factor analysis (CFA) were utilised. Some guidelines suggest using different sample to conduct both EFA and CFA (Dawson 2016), however, it is also not incorrect to use the same sample for both EFA and CFA if the final analysis includes a revisited model following the previous analysis (Kline 2015). For the current study, firstly, an exploratory factor analysis and Cronbach's Alpha were carried out to provide initial knowledge that these items load onto the expected factors which means they do not measure any other construct that they are supposed to, then a confirmatory factor analysis to provide more in-depth evidence to make sure the measures are suitable.

## **5.12 Unidimensionality and Validity**

The dimensionality of the construct refers to whether a variable is consisted of one or several factors (Hulland 1999). The main aim of dimensionality is to make sure that the items reflect one construct alone and is concerned with the homogeneity of items (Farooq 2016). Dimensionality can be measured by conducting EFA and CFA. As discussed in the previous section, for this current study, both EFA and CFA were undertaken, and discussed below.

In research, constructs can be unidimensional or multi-dimensional. Unidimensionality refers to the existence of one latent trait (construct) underlying a set of measures (Anderson et al. 1987). In other words, it means that the constructs are reproduced by a single factor when all the items are included (Kumar and Dillon 1987). Unidimensionality concerns with the items within each scale only appears because of respondents' true answers and random error, and not due to any other latent variable or systematic bias. On the other hand, multi-dimensional constructs are based on two or more underlying dimensions. A multi-dimensional construct, also called as 'higher-level construct' can only exist with its dimensions (Edward 2001) and underlies its dimensions.

The theory behind the unidimensionality is that within the laten variable modelling, items measuring the same variable should correlate with each other, and higher correlations indicates unidimensionality (Piedmont et al. 2006). Unidimensionality can be evaluated by both EFA and CFA. However, as EFA measures item-to-item correlations, utilising CFA is more appropriate to carry out (Farooq 2016). For the current study, many scales are multi-item measures which gives flexibility to the researcher to remove items and still effectively measure latent variables (Diamantopoulos et al. 2012).

As discussed in Chapter 3, social CRM capabilities were measured by 3 subdimensions (information dissemination, information generation and responsiveness). The three latent factors initially were assessed by using-multi-item scales. Each subdimension demonstrated adequate reliability, information dissemination ( $\alpha = 0.903$ ), information generation ( $\alpha = 0.917$ ) and responsiveness ( $\alpha = 0.936$ ). Unidimensionality were analysed by conducting a factorial analysis to obtain a single score. Once, it is obtained these three subdimensions were then combined into single-scale scores and treated as an individual indicator. This is in line with the previous research (Garrido-Moreno et al. 2018; Trainor et al. 2014).

Furthermore, unidimensionality is crucial, however it is not the only indicator of a scale's validity. Researchers should check for both reliability and validity when assessing reflective models. Construct's reliability and internal consistency can be assessed by Cronbach's Alpha whereas validity can be assessed by construct's convergent and discriminant validity (Hair et al. 2014). Validity examines the items for each construct and their ability to measure what it is theoretically proposed by the researcher (Carmines and Zeller 1979). Validity can be examined by recording construct's convergent and discriminant validity. Convergent validity observes similarity, on the other hand, discriminant validity examines the independency of the constructs to each other (Hair et al. 2010). For the convergent validity, loading for each item should be above 0.70, and each construct's average variance extracted (AVE) should be above 0.50 (Hair et al. 2014). AVE is the counterpart to the communality of a construct, and it means the grand mean value of the squared loadings of a set of indicators (Hair et al. 2014). For instance, a construct's AVE of 0.50 means that more than half the variance of its indicators. Moreover, discriminant validity is examined firstly by checking for cross-factor loadings by exploratory factor analysis. Secondly, confirmatory factor analysis has been applied, and any items displaying a correlation above 0.70 can be considered for removal as it shows that they are not theoretically related. Lastly, Fornell and Larcker criteria was utilised which assesses the comparison between the squared Pearson correlation coefficients and the average variance extracted of every construct with the lowest squared correlation should value less than the biggest than the AVE on the correlation matrix (Cheung et al. 2023). If the results indicate otherwise, this may mean that two or more constructs show theoretical similarity in which they may measure the same or similar scales. In this case, these constructs should be further examined separately from the other constructs presented.

### **5.13** Exploratory Factor Analysis Procedure and Internal Consistency

Exploratory factor analysis (EFA) is commonly used and applied statistical approach in social sciences. It is also the most appropriate procedure for the initial item selection which allows researchers to build a set of observed items, and the relationships between these items, then determine the latent constructs (Lee and Hooley 2005). Factor analysis can be used for purifying the data and the measures of the factors. Also, factor analysis is used to determine

the number of constructs assessed by the set of measures (Fabrigar and Wegener 2011). EFA estimates the loadings of each item onto a set of latent constructs (underlying factors, assuming that each item is caused by variation in latent constructs (Lee and Cadogan 2013). Each item should load onto one factor only, and items should not cross-load to another factor. Thus, EFA is appropriate for the item selection at this process as it enables to purify the measures if an item loads onto more than one factor or loads onto a different factor to other items which shows that there may be an issue with that specific measure.

A factor analysis is essentially important to understand the underlying factor structure to a given set of items (Lee and Hooley 2005). There are two main dimension reduction techniques which are principal component analysis (PCA) and factor analysis (FA). The main difference is that PCA attempts to take the observed variance in the dataset to create new variables that are made from the original items (Abdi et al. 2013). On the other hand, FA attempts to use latent constructs responsible for the observed correlations between the original items (Lee and Hooley 2005) It is crucial that the variables represent what they conceptually and theoretically proposed by the researcher, therefore, this study employs common factor analysis as the variables that are created by PCA do not have any conceptually meaning.

Common factor analysis can be carried out via multiple ways. However, combination of principal axis factoring and the oblimin rotation is the ideal method for the accuracy (Lee and Hooley 2005). Oblimin rotation is a more realistic assumption that enables factors to be correlated which helps with identifying any issues within the measures (Lee and Hooley 2005). As mentioned above, items should not load on more than one factor. If an item loads on more than one factor at a high level, it means that there might be an issue with multidimensionality which may cause problems with the model fit, and the potential relationships. However, the items that measure the same latent factor theoretically, it is assumed that they have a mutual cause of the same underlying latent factor, therefore, they should correlate with each other (Lee and Lings 2008). It is important to utilise the exploratory factor analysis as it demonstrates the loadings of the items onto different latent factors, enables to establish the internal consistency and reliability of the items, and it can be seen as an essential step before the confirmatory factor analysis (CFA). Although the present study only utilised established scales and therefore EFA is not necessary as the data is not being explored, however, the current study utilises EFA to gain a general understanding of measurement quality before applying the stricter CFA.

Cronbach's (1951) coefficient alpha has been used to evaluate multi-item scales' internal consistency. Initial scale reliabilities are examined before the multi-item scales are processed by the EFA and CFA. Loadings above 0.7 are considered to acceptable (Bagozzi and Yi 1988) however, scores of 0.6 are also appropriate for exploratory factor analysis. The Cronbach alpha is calculated by the following equation (Sijtsma 2009):

$$\alpha = \frac{n}{(n-1)} \times \left(1 - \frac{\sum_{i=1}^{n} V_i}{V_t}\right)$$

Where  $\alpha$  = Cronbach's (1951) alpha coefficient;

n = number of items;

 $V_i$  = variance of scores on each item;

 $V_t$  = total variance of overall scores on complete test.

This study utilised Bartlett's test to observe items' homogeneity, which measures whether the variables are independent in the population, however as the test can be inaccurate depending on the sample size (Hair et al. 1998), the Kaiser-Meyer-Olkin (KMO) measure is also utilised for the accuracy. KMO measure is used to assess the suitability of data for factor analysis, which evaluates the adequacy of the sample size and the degree of common variance among the variables that is essential for conducting factor analysis effectively. There is no evidence on the statistical tests for the KMO measure, however, the values over 0.5 are considered to indicate that the data is suitable for factor analysis (Hair et al. 1998). In regard to the observation of the item loadings on the extracted factors, 0.45 was used as the minimal factor to specify a significant loading. Commonly, 0.3 is considered to be the lowest value to imply the significance of the loadings, however, this can depend on the sample size as a loading of 0.3 requires a sample size of 350 and above, whereas when a sample size around 150 (it is 217

in this study), the value increases 15% to 0.45 for the factor loading to be significant (Hair et al. 1998).

## **5.14 Confirmatory Factor Analysis Procedure**

Confirmatory factor analysis (CFA) is used to test a hypothesis or theory within the structural equation modelling (SEM). As mentioned above, EFA is applied first for the item selection, and the remaining items are further examined using CFA, which is a common procedure within the social sciences (Affum-Osei et al. 2019). The current study utilised LISREL 9.3 software package for the CFA procedure.

Moreover, the difference between EFA and CFA is that the CFA enables researchers to empirical validations of the items, and evaluates their reliability, validity, and unidimensionality. Although it is possible to examine these with the EFA, CFA provides more robust analysis. In addition, conducting CFA is not solely about examining the items or confirming or rejecting the factor model, it also allows researchers to revise and refine a CFA model by using set of criteria (Phakiti 2018). Most commonly, researchers look for the fit indices, modification indices and standardised residuals to confirm or enhance the reliability, validity, and unidimensionality. Another difference between EFA and CFA is that exact structures are pre-specified within CFA, which means that the items are expected to load on each latent variable that are hypothesised in the model.

Furthermore, there are numerous fit indices that are used by researchers to determine whether the model fits or not. These indices include the chi-square  $(x^2)$ , normed fit index (NFI), comparative fit index (CFI), non-normed fit index (NNFI), and the root mean square error of approximation (RMSEA). The chi-square  $(x^2)$  test has been used widely by the researchers as it enables to evaluate the model fit. However, it has been found that  $(x^2)$  statistics can be problematic as it is sensitive to sample size which can lead to invalidity of the statistics and consequently eliminating the good models or retaining the bad model fits (Albright and Park 2009). Therefore, it has been suggested that researchers should check for other fit indices mentioned above combined with the  $x^2$  to properly assess model fit (Mulaik et al. 1989). For the CFA framework, a non-significant chi-square statistic indicates that the proposed model

fits well as it shows that the model is not significantly different to the real world. In regard to the RMSEA, values below 0.08 are considered to be an acceptable fit with the values 0.05 indicates a good fit (Albright 2008). Finally, for the NFI, CFI, and NNFI values range between 0 and 1, and values over 0.9 are considered to be an acceptable fit (Newsom 2015). In addition to these procedures, LISREL 9.3 enables to assess the modification indices of the LAMBDA-X (factor loading) and THETA-DELTA (error variance) in which higher values suggest the potential issues (Diamantopoulos and Siguaw 2000). This is particularly crucial when the specified measurement models do not provide an acceptable fit. However, any changes to model should be theoretically justified to avoid the purely data-driven results.

Additionally, composite reliability is examined to evaluate the internal consistency of each item within the scales. This procedure allows to evaluate the reliability of a scale and the values above 0.7 indicates an adequate internal consistency (Schneider 2008). Composite reliability signifies the overall reliability of items and reflects the impact of error of a scale (Raykov and Grayson 2003) and mostly values over 0.6 are acceptable. It has been argued that adequate composite reliability value can indicate that the measured construct also shows an adequate convergent validity (Fornell and Larcker 1982). Lastly, the average variance extracted (AVE) assesses the relationship between the amount of variance obtained by the construct and the amount of variance in the construct due to the measurement error (Fornell and Larcker 1982. For an adequate AVE, values above 0.5 are considered to be the minimum threshold which means that the values less than 0.5 indicates that the variance due to the measurement error is higher than the variance obtained by the construct in which the validity of the construct can be doubted (Fornell and Larcker 1982).

Following this discussion, firstly the  $x^2$  was assessed, followed by the examination of CFI, NNFI, NFI and RMSEA. Once the results of the CFA were evaluated, any items that affected the fit indices were removed to purify the measures. Also, the composite reliability ( $P_c$ ) and the AVE ( $P_v$ ) were assessed for each scale.

### 5.15 Individual Scale Results Using EFA

This section provides the results of the first step of the measurement development process. EFA process and internal consistency analysis were used, and each measure was individually examined.

### 5.15.1 Entrepreneurial Orientation

#### 1. Innovativeness

Innovativeness was measured on a 5-item scale, with a Cronbach Alpha of 0.951 which is above the 0.7 threshold (Bagozzi and Yi 1988). Both the KMO and Bartlett's tests implied that the dataset is appropriate for EFA. EFA extracted a single factor explaining 82% of the common variance which means that there is no requirement to remove any items at this stage. Table 18 shows the results of the EFA procedure.

**Table 18 Innovativeness Scale** 

Scale Items	Factor Loading
Our company is known as an innovator among businesses in our industry.	0.894
We promote new, innovative product/services in our company.	0.917
Our company provides leadership in developing new products/services.	0.936
Our company is constantly experimenting with new products/services.	0.917
We have built a reputation for being the best in our industry to develop new methods	
and technologies.	0.844
KMO = $0.882$ ; Bartlett's Test = $1147.958$ , DoF: $10$ , $p = 0.001$	

### 2. Risk-Taking

Risk-taking was measured on a 3-item scale, with a Cronbach Alpha of 0.962, above the threshold of 0.7 (Bagozzi and Yi 1988) The KMO and Bartlett's tests indicated the appropriateness of the dataset for EFA. In addition, EFA extracted a single factor explaining 89% of the common variance, all the items were kept for further analysis.

Table 19 shows the results of the EFA procedure.

**Table 19 Risk-Taking Scale** 

Scale Items	Factor Loading
Top managers of our company, in general, tend to invest in high-risk projects.	0.917
This company shows a great deal of tolerance for high-risk projects.	0.978
Our business strategy is characterized by a strong tendency to take risks.	0.945
KMO = 0.756; Bartlett's Test = 770.297, DoF: $3, p = 0.000$	

#### 3. Proactiveness

Proactiveness was measured on a 3-item scale, with a Cronbach Alpha of 0.917, above the threshold of 0.7 (Bagozzi and Yi 1988). The KMO and Bartlett's tests are evidence of the appropriateness of the dataset for EFA. Also, EFA extracted a single factor explaining 80% of the common variance which means that the no items were not removed at this stage. Table 20 shows the results of the EFA procedure.

Table 20 Proactiveness Scale

Scale Items	Factor Loading
We seek to exploit anticipated changes in our target market ahead of our rivals.	0.925
We seize initiatives whenever possible in our target market operations.	0.966
We act opportunistically to shape the business environment in which we operate.	0.784
KMO = 0.711; Bartlett's Test = 526.275, DoF: 3, $p = 0.000$	

#### 4. Aggressiveness

Aggressiveness was measured on a 3-item scale, with a Cronbach Alpha of 0.9 which is above the threshold of 0.7 (Bagozzi and Yi 1988). Both the KMO and Bartlett's tests indicated that the dataset it appropriate for EFA. Additionally, EFA extracted a single factor showing 76% of the common variance, therefore, all the items were kept at this stage. Table 21 shows the results of the EFA procedure.

**Table 21 Aggressiveness Scale** 

Scale Items	Factor Loading
We typically adopt an "undo-the-competitor" posture in our target markets.	0.750
We take hostile steps to achieve competitive goals in our target markets.	0.940
Our actions toward competitors can be termed as aggressive.	0.921
KMO = 0.714; Bartlett's Test = 443.793, DoF: $3, p = 0.000$	

### 5. Autonomy

Autonomy was measured on a 3-item scale, with a Cronbach Alpha of 0.919, above the threshold of 0.7 (Bagozzi and Yi 1988). Both the KMO and Bartlett's tests demonstrated that the dataset is appropriate for EFA. In addition, EFA extracted a single factor explaining 80% of the common variance, therefore there were no requirement to remove any items at this stage. Table 22 shows the results of the EFA procedure.

**Table 22 Autonomy Scale** 

Scale Items	Factor Loading
Personnel behave autonomously in our business operations.	0.914
Personnel act independently to carry out their business ideas through to completion.	0.920
Personnel are self-directed in pursuit of target market opportunities.	0.841
KMO = $0.752$ ; Bartlett's Test = $478.616$ , DoF: 3, $p = 0.001$	

## 5.15.2 Social CRM Capabilities

Social CRM capabilities was measured on a 13-item scale, with a Cronbach Alpha of 0.961, which is above the threshold of 0.7 (Bagozzi and Yi 1988). The KMO and Bartlett's both indicated that the dataset is suitable for EFA. Moreover, EFA extracted a single factor explaining 75% of the common variance, thus, all the items remained for further analysis. Table 23 shows the results of the EFA procedure.

**Table 23 Social CRM Capabilities Scale** 

Measurement items	Factor Loading	
We use social media to conduct market research.	0.711	
We use social media to detect changes in our customers' product		
preferences	0.807	
We use social media to detect fundamental shifts in our industry		
(e.g., competition)	0.768	
We have frequent interdepartmental meetings to discuss market	0.786	
trends identified via social media.		
Marketing personnel spend time discussing customers' future	0.849	
needs identified on social media applications with other		
departments.		
Data collected using social media on customer satisfaction are		
disseminated at all levels on a regular basis.	0.885	
When one department finds out something important about	0.788	
competitors using social media, it is quick to alert other		
departments.		

We use social media to respond to our competitor's price changes.	0.806
We pay attention to changes in our customers' products or service	0.863
needs using social media.	
If a major competitor launched an intensive campaign targeting	0.836
our customers, we would respond immediately using social	
media.	
The social media activities of the different departments are well	0.867
coordinated.	
Customer complaints can be filed and tracked using social media	0.777
in our firm.	
When our customers want us to modify a product or service, we	0.772
announce that change using social media.	

KMO = 0.947; Bartlett's Test = 2701.908, DoF: 78, p = 0.000

## 5.15.3 Customer-centric Management Systems

Customer-centric management systems was measured on a 6-item scale, with a Cronbach Alpha of 0.910, which is above the threshold of 0.7 (Bagozzi and Yi 1988). Both the KMO and Bartlett's tests implied that the dataset it suitable for EFA. Moreover, EFA extracted a single factor explaining 66% of the common variance, accordingly all items are kept for further analysis. Table 24 shows the results of the EFA procedure.

**Table 24 Customer-centric Management Systems Scale** 

Scale Items	Factor Loading
We focus on customer needs while designing business processes.	0.749
Employees receive incentives based on customer satisfaction measures.	0.724
A key criterion used to evaluate our customer contact employees is the quality of their	
customer relationships.	0.892
Business processes are designed to enhance the quality of customer interactions.	0.871
We organize our company around customer-based groups rather than product or	
function-based groups.	0.751
Various functional areas coordinate their activities to enhance the quality of customer	
experience.	0.894
KMO = $0.886$ ; Bartlett's Test = $897.290$ , DoF: $15$ , $p = 0.001$	

#### 5.15.4 Firm Performance

Firm performance was measured on a 3-item scale, with a Cronbach Alpha of 0.939, above the threshold of 0.7 (Bagozzi and Yi 1988). The KMO and Bartlett's tests both demonstrated that the dataset is appropriate for EFA. Additionally, EFA extracted a single factor explaining 83%

of the common variance, thus, there are no requirement for any items to be removed at this stage. Table 25 shows the results of the EFA procedure.

**Table 25 Firm Performance Scale** 

Scale Items	Factor Loading
Market share growth	0.928
Sales growth	0.929
Profitability growth	0.889
KMO = 0.767; Bartlett's Test	= 573.135, DoF: 3, $p = 0.000$

# 5.16 Group Analysis Using CFA

As discussed, and presented above, EFA was conducted, and it was concluded that the dataset for all of the measures is appropriate for further testing. CFA can provide a more robust results of the utilised measures. This is because EFA on its own does not help to determine whether the model is fit or misfit, whereas CFA can identify where the model misfit appears (Bryne 2005). In addition, EFA examines the data which essentially there are no constraints imposed on the data whereas CFA is theory-driven which determines whether the data matches with the pre-discussed theoretical background (Albright 2008). For the CFA, this study analysed the items in sub-sets. This is because the current study contains 12 variables and 47 items which requires an extensive sample size. However, it was concluded that this was unrealistic. Therefore, it would be too much for all items to be placed into a single analysis with the needed sample size for the CFA. Moreover, in order to prevent the non-convergence or poor model fit which may happen when there are many items and smaller sample size (Harrington 2009), this study analysed the items in sub-sets for the confirmatory factor analysis (e.g., Cadogan et al. 2006).

Furthermore, the items that were retained from the EFA procedure (all items were retained), were placed into CFAs utilising LISREL 9.3 software to check for acceptable unidimensionality. The main objectives in this procedure to make sure that each item only reflect the hypothesised construct, items should not correlate with other items, and attain low values on the residual matrix which means that the covariances in the data are adequately explained by the model. In addition, single item measures were not included in the EFA procedure, however they are examined with the CFA. Although it has been argued that the

multiple items are considered needed as the single items are not able to acquire the full substance of a latent construct (Steenkamp and Baumgartner 2000), it has been found that single items can adequately measure unidimensional constructs (Hayduk and Littyay 2012).

The following section presents the results of CFAs on each group. For the single item measures (experience and firm size), the factor loading is set to 1 and error variances are fixed to be able to get the estimation. For the expected reliability the minimum value is 0.7 as within the marketing literature the values range from 0.7 to 0.95 (Petrescu 2013). Below Table 26 shows the two sub-sets created for the CFA procedure. Sub-sets should be determined by their conceptual similarity. Therefore, for the current study, first sub-set includes the independent variables (EO dimensions), and the second sub-set includes the core variable (social CRM capabilities), dependent variable (firm performance), moderator (customer-centric management systems), and lastly the control variables (technology resources, firm size, and experience).

Table 26 Sub-sets for the CFA analyses

Subset	Variables included
One	Innovativeness
	Risk-taking
	Autonomy
	Proactiveness
	Aggressiveness
Two	Social CRM Capabilities
	Customer-centric Management Systems
	Firm Performance
	Technology Resources
	Firm Size
	Experience

## **5.16.1** Group 1: Entrepreneurial Orientation

As discussed above, the first group for the measurement model includes the dimensions of entrepreneurial orientation scale. There were total of 17 items measured. One significant issue was that one of the items of five item scale for the innovativeness demonstrated high residuals value which means there might be an issue with the variable bias and measurement error, and therefore it was removed to prevent these issues and to enable for a better model fit. As the table 5.17 indicates, CFA measurement model for sub-set one demonstrates acceptable

statistics. The chi-square was significant at 167.99 (p = 0.00) with degree of freedom at 94 and the RMSEA measured at 0.06. The other fit indices CFI, NFI and NNFI exhibits good model fit with the values recorded at 0.990, 0.979, and 0.988. In regard to the individual scales, all the AVEs and CRs are over the threshold of 0.5 and 0.6 which suggests that there are no concerns for convergent validity and reliability (Bagozzi and Yi 1988). Lastly, all the factor loadings for the entrepreneurial orientation scales are significant which indicates the reliability of the scales.

Table 27 below presents the results of the confirmatory factor analysis.

**Table 27 Group 1 CFA Results** 

Measurement items	Standardized Factor Loading (t-value)				
	Inno.	Risk	Auto.	Pro.	Agg.
Our company is known as an innovator among businesses in our industry.  We promote new, innovative product/services in our company* Our company provides leadership in developing new products/services. Our company is constantly experimenting with new products/services. We have built a reputation for being the best in our industry to develop new methods and technologies. Top managers of our company, in general, tend to invest in high-risk projects.	0.90 (fixed) 0.92 (22.16) 0.92 (22.32) 0.91 (21.37) 0.83 (17.67)	0.92 (fixed)			
This company shows a great deal of tolerance for high-risk projects.		0.97 (28.26)			
Our business strategy is characterized by a strong tendency to take risks.		0.95 (26.22)			
Personnel behave autonomously in our business operations.			0.91 (fixed)		
Personnel act independently to carry out their business ideas through to			0.92 (20.42)		
completion.  Personnel are self-directed in pursuit of target market opportunities.  We seek to exploit anticipated changes in			0.85 (17.63)	0.93	
our target market ahead of our rivals.  We seize initiatives whenever possible in our target market operations.  We act opportunistically to shape the business environment in which we operate.				(fixed) 0.95 (26.05) 0.79 (16.42)	
We typically adopt an "undo-the- competitor" posture in our target markets. We take hostile steps to achieve competitive goals in our target markets.					0.76 (fixed) 0.94

Our actions toward competitors can be					(14.70)	
termed as aggressive					0.90	
					(14.32)	
Composite Reliability (CR)	0.95	0.96	0.92	0.92	0.90	
Average Variance Extracted (AVE)	0.80	0.89	0.79	0.79	0.75	
Fit Indices: Chi Square = 167.99	Df = 94 (p)	o = 0.00, R	MSEA = 0.	060, CFI =	0.990,	
_	NFI =0	.979				
NNFI = 0.9	88 Standar	dised RMR	= 0.056			

 $<sup>* = (</sup>item \ deleted)$ 

## 5.16.2 Group 2: Core Variables and Control Variables

This sub-set group includes the core variables such social CRM capabilities and firm performance and customer-centric management systems as well as includes the control variables, technology resources, firm size and experience. There were total of 30 items measured and two of these items (firm size and experience) were single item indicators. Important issues were identified in the second sub-set in which some items representing social CRM capabilities indicated high values in the residual matrix. This issue suggests that some measures were not sufficiently unidimensional in the first specified model thus requiring respecification. In total, four items were eliminated from the social CRM capabilities scale, and the re-specified model exhibited acceptable fit.

As table 5.18 indicates, CFA measurement model for group two demonstrates acceptable statistics. The chi-square was significant at 535.31 (p = 0.00) with degree of freedom at 286 and the RMSEA measured at 0.06. The other fit indices CFI, NFI and NNFI exhibits good model fit with the values recorded at 0.980, 0.959, and 0.977. In regard to the individual scales, all the AVEs and CRs are above the threshold of 0.5 and 0.6 which suggests that there are no concerns for convergent validity and reliability (Bagozzi and Yi 1988). Lastly, all the factor loadings for all of the scales are significant which indicates the reliability of the scales. Table 28 below presents the results of the confirmatory factor analysis.

**Table 28 Group 2 CFA Results** 

Measurement items		Standardized Factor Loading (t-value)			e)	
	SCRM	CCMS	FP	TECH.	SIZE	EXP.
We use social media to conduct	0.71					
market research.*	(12.56)					
We use social media to detect	0.79					
changes in our customers' product	(15.13)					
preferences.	0.76					
We use social media to detect	0.76					
fundamental shifts in our industry (e.g., competition).*	(14.09)					
We have frequent interdepartmental	0.80					
meetings to discuss market trends	(15.23)					
identified via social media.	( )					
Marketing personnel spend time						
discussing customers' future needs	0.86					
identified on social media	(17.46)					
applications with other departments*	(1,110)					
Data collected using social media on	0.89					
customer satisfaction are	(18.76)					
disseminated at all levels on a regular	(10.70)					
basis.	0.00					
When one department finds out	0.80					
something important about	(15.22)					
competitors using social media, it is						
quick to alert other department.*	0.01					
We use social media to respond to	0.81					
our competitor's price changes.	(15.56)					
We pay attention to changes in our	0.06					
customers' products or service needs	0.86					
using social media.	(17.59)					
If a major competitor launched an	0.02					
intensive campaign targeting our	0.83					
customers, we would respond	(16.50)					
immediately using social media.						
The social media activities of the	0.87					
different departments are well	(fixed)					
coordinated.						
Customer complaints can be filed and						
racked using social media in our	0.79					
firm.	(14.93)					
When our customers want us to						
modify a product or service, we	0.77					
announce that change using social	(14.48)					
media.						
We focus on customer needs while		0.74				
designing business processes.		(fixed)				
Employees receive incentives based		0.73				
on customer satisfaction measures.		(10.89)				
A key criterion used to evaluate our		0.86				
customer contact employees is the		(13.07)				
quality of their customer		,				
relationships.						

Business processes are designed to		0.87									
enhance the quality of customer		(13.20)									
interactions.											
We organize our company around		0.75									
customer-based groups rather than		(11.16)									
product or function-based groups.		, ,									
Various functional areas coordinate		0.87									
their activities to enhance the quality		(13.21)									
of customer experience.		( - ' )									
			0.93								
Market share growth			(fixed)								
manier share growen			0.93								
Sales growth			(23.39)								
bules growin			0.89								
Profitability growth			(21.08)								
providing front-line employees with			(21.00)	0.79							
customer information				(fixed)							
supporting marketing planning and				0.78							
budgeting				(12.19)							
allowing customer support employees				0.77							
to access data on customer				(12.07)							
interactions				0.79							
assessing channel member				(12.41)							
performance				0.77							
•				(12.03)							
integrating customer information				(12.03)							
from different contact points (e.g.,				0.78							
mail, web, fax, etc.)											
tracking customer information				(12.27)							
How many amployees are weaking					1						
How many employees are working for the firm?					(fixed)						
					(IIxeu)	1 (6: 4)					
How long has your firm been using						1 (fixed)					
social media?	0.05	0.01	0.04	0.00							
Composite Reliability (CR)	0.95	0.91	0.94	0.90							
Average Variance Extracted	0.60	0.64	0.04	0.60							
(AVE)	0.60	0.64	0.84	0.60							
Fit Indices: Chi Square = $535.31$ , Df = $286$ (p = $0.00$ ), RMSEA = $0.064$ , CFI = $0.980$ ,											
	NFI = 0.9		0.0450								
NNFI = 0.9	NNFI = 0.977, Standardised $RMR = 0.0458$										

<sup>\* =</sup> Item deleted

## **5.17 Discriminant Validity Analysis**

Discriminant validity is crucial to measure as it indicates the construct's similarity to each other. As all of the variables should only measure what they are supposed to measure, constructs should not overlap between them (Hamid et al. 2017). By definition, variables are not tangible and as a result, it is necessary to prove that all variables in the model measure different scales, and not reflect each other (Voorhees et al. 2016). For the current study, two sub-set groups were utilised to measure the CFA, thus, it is essential to further analyse the discriminant validity. The discriminant validity can be measured by utilising Fornell and Lacker's method of cross-loadings of indicators and HTMT correlations (Hamid et al. 2017). For this study, firstly Fornell-Lacker method was utilised to assess the discriminant validity. The criterion for this method is comparing the Pearson correlations to the average variance extracted with the highest squared correlation value should be over than the lowest average variance extracted (Cheung et al. 2023). As it can be seen in Table 29 below demonstrates that the lowest AVE value is 0.6 - not including the single item measures as they are set to 0.5-, and highest squared Pearson correlation value is 0.54 which indicates that there are no problems with the discriminant validity.

**Table 29 Squared Pearson Correlation Coefficients and AVEs** 

	EOINN	EORI	<b>EPRO</b>	EOAGG	<b>EOAUT</b>	SCRM	CCMS	FP	TECHRES	EXP	SIZE
EOINN	0.8										
EORI	0.4	0.89									
EPRO	0.54	0.43	0.79								
EOAGG	0.11	0.22	0.21	0.75							
<b>EOAUT</b>	0.27	0.34	0.33	0.31	0.79						
SCRM	0.29	0.27	0.27	0.21	0.29	0.6					
CCMS	0.42	0.18	0.37	0.09	0.27	0.48	0.64				
FP	0.29	0.18	0.27	0.06	0.19	0.06	0.12	0.84			
<b>TECHRES</b>	0.25	0.14	0.23	0.08	0.17	0.33	0.42	0.08	0.6		
EXP	0	0	0	0	0	0	0	0	0	0.5	
SIZE	0.01	0	0	0.01	0	0	0	0.06	0	0.04	0.5

\*EOINN = innovativeness, EORI = risk-taking, EOPRO = proactiveness, EOAGG = aggressiveness, EOAUT = autonomy, SCRM = social CRM capabilities, CCMS = customer centric management systems, FP = firm performance, TECHRES = technology resources, EXP = experience, SIZE = firm size

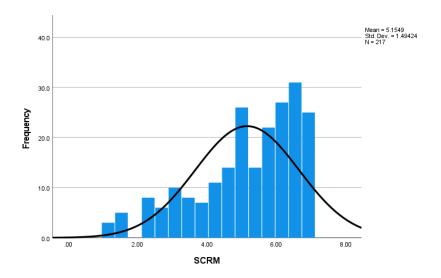
## **5.18 Descriptive Statistics**

As discussed above, EFA and CFA were conducted to assess the items before hypothesis testing commences. The final step is to evaluate the characteristics of the final scales to validate the measures for further hypothesis testing. The current study utilised the distributional characteristics of the measures with the graphical figures were assessed to gain interpretation of each measure's distribution. To measure the normal distribution, the Kogomorov-Smirnoff (KS) test was utilised which provided the normality of the distribution. Although the KS test indicated that there is no substantial deviation from normality, it has been argued that this test may not provide minor deviances. Thus, this study also utilised the examination of the kurtosis and skewness of the measures to provide more robust results. The values for skewness and kurtosis should be between -2 and +2 to prove normal distribution (George and Mallery 2010). This section provides visual histograms as indication of the normality of the constructs, and kurtosis and skewness statistics are also discussed.

#### **5.18.1 Social CRM Capabilities**

Figure 2 shows the frequency distribution of the social CRM capabilities. There are no apparent missing values. The values for skewness and kurtosis were recorded at -0.81 and -0.19. In addition, there were no major deviation from normality, therefore, the scale was retained for further analysis.

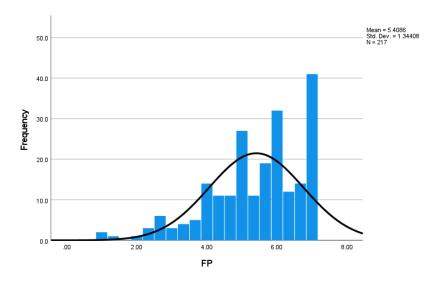
Figure 2 Social CRM Capabilities



# **5.18.2 Firm Performance**

Figure 3 represent the frequency distribution of firm performance scale. There was no evidence of missing values. The values for skewness and kurtosis were -0.85 and 0.42. Examination of the distribution indicated no major deviation from normality, thus, the scale was retained for further analysis.

**Figure 3 Firm Performance** 

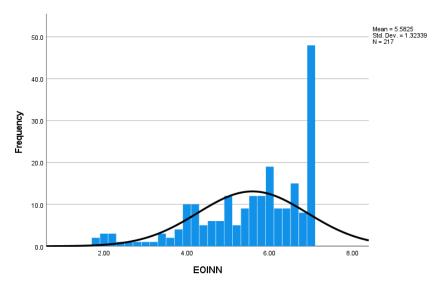


## 5.18.3 Entrepreneurial Orientation

#### **Innovativeness**

Figure 4 shows the frequency distribution of the EO-Innovativeness scale. There were no missing values evident, with the values for skewness and kurtosis were recorded at -0.91 and 0.22. In addition, there were no major deviation from normality, therefore, the scale was retained for further analysis.

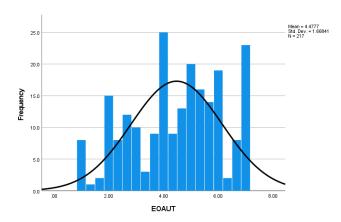
# Figure 4 Innovativeness



# Autonomy

Figure 5 shows the frequency distribution of the EO-Autonomy scale. Again, there were no missing values recorded, with the values for skewness and kurtosis at -0.26 and -0.83. On examination of the distribution showed that there was no significant deviation from normality, thus, the scale was retained for further analysis.

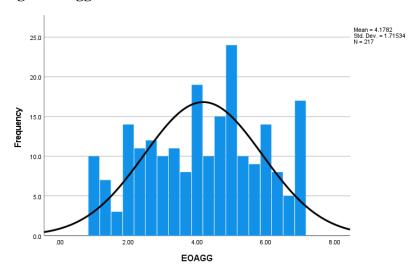
**Figure 5 Autonomy** 



# Aggressiveness

Figure 6 shows the frequency distribution of the EO-Aggressiveness scale. Again, there were no missing values recorded, with the values for skewness and kurtosis at -0.11 and -0.95. Additionally, there were no major deviation from normality, therefore, the scale was retained for further analysis.

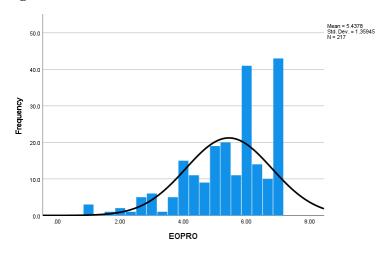
Figure 6 Aggressiveness



#### **Proactiveness**

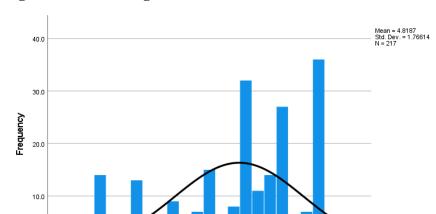
Figure 7 shows the frequency distribution of the EO-Proactiveness scale. There were no missing values evident, with the values for skewness and kurtosis recorded at -0.97 and 0.7. On examination of the distribution showed that there was no significant deviation from normality, thus, the scale was kept for further analysis.

Figure 7 Proactiveness



## Risk-Taking

Figure 8 shows the frequency distribution of the EO-Risk-taking scale. Again, there were no missing values evident, with the values for skewness and kurtosis recorded at -0.66 and -0.47. There was no major deviation from normality and the scale was retained for further analysis.



EORI

Figure 8 Risk-Taking

# **5.18.4** Customer-centric Management Systems

Figure 9 shows the frequency distribution of the customer-centric management systems scale. Again, there were no missing values evident, with the values for skewness and kurtosis recorded at -0.98 and 0.65. On examination of the distribution, there were no significant deviation from normality, therefore, the scale was retained for further analysis.

8.00

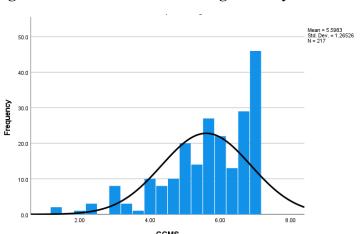


Figure 9 Customer-centric Management Systems

#### **5.18.5 Technology Resources**

Figure 10 shows the frequency distribution of the technology resources scale. There were no missing values evident, with the values for skewness and kurtosis recorded at -1.13 and 1.65. Additionally, there were no major deviation from normality, therefore, the scale was retained for further analysis.

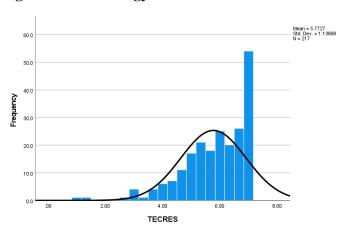


Figure 10 Technology Resources

# **5.19 Chapter Summary**

This chapter provided a descriptive analysis of the sample for the current study. The descriptive analysis delivered an overview of the general characteristics of the B2B firms examined within the present study which included some demographical information about the respondents as well as firm related information such as the industry, firm size and their use of social media.

Moreover, this chapter presented the results from the measure development process. This started with the discussions on EFA and CFA, followed by presenting the results from this analysis. EFA was conducted to gain an initial understanding on the measures, and CFA, then refined the measures to obtain the most reliable and valid measures possible for the current study. This chapter also discussed the unidimensionality, reliability, internal consistency,

convergent and discriminant validity Following the discussions and relevant tests, it was concluded that all the constructs presented in this study were appropriate to utilise. The current study conducted hypotheses testing utilising structural equation modeling, which it was crucial to carry out CFA before hypotheses testing can commence. This chapter concluded the measure development process, and the next chapter discussed the analytical choices that are made and analysis of the theoretical model with the hypotheses testing are demonstrated.

# **CHAPTER 6: ANALYSIS**

## **6.1 Chapter Introduction**

The previous chapter provided an assessment of the measures utilised to test the conceptual models of the current study. This chapter is the final chapter discussed the analysis of the data. To start with, the overall analysis strategy is discussed, and the choice of structural equation modeling is justified. The other analytical decisions were then discussed and justified. The chapter then provides the hypotheses testing which developed in Chapter 3. As discussed, and presented in Chapter 3, this study examines the relationship between entrepreneurial orientation, and social CRM capabilities with the outcome of firm performance. Customercentric managements systems is also considered to be positively moderated the relationship between entrepreneurial orientation and social CRM capabilities. Analysis of the conceptual model is examined. Finally, the common method bias is discussed and justified.

## **6.2** Analysis Strategy Considerations

Structural equation modeling (SEM) and multilevel modeling (MLM) are the two main statistical methods used by social sciences researchers to test proposed hypotheses. MLM, also called multilevel or hierarchical modeling, is used when there are two or more than two levels to the data which there is nesting within the data (i.e., students are nested within schools and many schools exist) (Ullman and Bentler 2012). SEM, on the other hand, allows researchers to examine the relationships between the independent variables and latent variables as well as it allows for the simultaneous examination for the measurement and structural model. For the current study, covariance-based SEM is utilised by using LISREL 9.3 software package. This is because, this study is a cross-sectional study, in which data was only collected once, therefore, the measures were only used once. MLM is more appropriate for the repeated measures studies such as longitudinal where data is collected more than once at different time horizons. Also, MLM is preferred when researchers deal with the smaller sample size (Skrondal and Rabe-Hesketh 2004). For SEM, although the minimum sample size should depend on the

proposed model's complexity (Hair et al. 2010), it is recommended that the sample size should be minimum of 100 respondents (McNeish 2017), as discussed in Chapter 4, the sample size for this study is 217, thus, utilising SEM is more appropriate than MLM.

Structural equation modeling includes different types of analysis such as confirmatory factor analysis, regression analysis, analysis of variance and confirmatory composite analysis (Henseler and Schuberth 2022). It enables researchers to examine the relationships between conceptual variables and observed variables as well as allowing to model theories of conceptual variables. Additionally, SEM can provide estimates of the full conceptual model such as means, covariances, variances and standard errors (Ledermann and Kenny 2017). Accordingly, it has become a broadly used analysis method in social sciences and business research (Henseler and Schuberth 2022). There are two main methods within the SEM analysis, covariance-based SEM (CB-SEM) and partial least squares SEM (PLS-SEM). Covariance-based SEM is mostly utilised for testing hypotheses in order to confirm or reject the proposed hypotheses within the study (Hair et al. 2021). This approach confirms or rejects hypotheses by determining the extent to which the covariance matrix for an observed dataset reproduces the theoretical model. On the other hand, PLS has been established as a causal contact approach, which explains the variance in the model's dependent constructs (Chin et al. 2020).

Recently, both the CB-SEM and the PLS-SEM approaches have gained interest amongst marketing researchers. Although these two approaches are both under the structural equation modeling, there are inconsistent views on the PLS-SEM which has received substantial criticism by researchers. These criticisms involve arguments around small sample sizes, inability to test complex models and being restricted to formative measures (Sarstedt et al. 2014). Moreover, one of the most important criticisms PLS has received is that PLS can bias correlations (Rönkkö et al. 2023). This can happen in two different ways, first, PLS can inflate regression coefficients when two variables are not strongly correlated; second, PLS is likely to increase the bias when there are cross-loadings or correlated errors between different scales (Rönkkö et al. 2023). In addition, PLS does not do factor analysis, therefore, assessing the measurement quality by using AVE and composite reliability are not relevant. Mostly, in PLS, the reported loadings are the correlations between indicators and composites that they form, which leads to a great bias in the AVE and composite reliability values (Rönkkö et al. 2023).

Furthermore, considering the issues discussed above, the present study applied covariance-based SEM approach to analyse data. CB-SEM allows researchers to assess complex models and interactive effects. Additionally, CB-SEM calculates the error variances that are modelled for each indicator and loadings of the individual indicator can be obtained which allows the elimination of indicators with larger error and low loading values, consequently it improves the quality of the latent variables (Hair et al. 2014). Finally, CB-SEM can be applied to assess a moderating effect where a third variable can change the relationship between two variables (Hair et al. 2010). As discussed, the current study examines the moderating effect of customer-centric management systems on the entrepreneurial orientation and social CRM capabilities, thus it has been concluded that utilising CB-SEM in comparison to PLS-SEM is more appropriate for the current study.

#### **6.3 Moderation**

For the current study, relationships between entrepreneurial orientation scales and social CRM capabilities are expected to be moderated by customer-centric management systems. Evaluating how variables interact with one another is vital for both theoretical progress and practical application particularly in business and psychology research (Cheung et al. 2021). An interaction occurs when the connection between two variables changes depending on the value of a third variable (Cheung et al. 2021). These types of interactions are frequently hypothesised in theories pertaining to business and psychology studies (Cheung et al. 2021). A moderator is a variable that influences the strength or direction of the relationship between two other variables, whereas moderation refers to the impact that the moderator variable exerts on this relationship (Dawson 2013). Given that the constructs in the model are regarded as continuous variables, moderation can be explored through either conducting a multi-group analysis or examining interactions with continuous variables (Hair et al. 2010). For this study, the second option is preferred as this approach maintains the reliability of the sample (e.g., Sharma et al. 1981). There are two common ways to analyse interactions; mean centering and residual centering. This study employed residual centering approach. This is because this method has been used as alternative to mean centering approach as it can reduce the nonessential multicollinearity in regression analysis (Little et al. 2007). Additionally, this study employed continuous variables, therefore residual centering is appropriate for analysing interactions (Marsh et al. 2007). In comparison to mean centering, residual centering is more rigorous and provide a more precise separation of interaction effects from main effects, whereas mean centering is sufficient when the primary concern is reducing multicollinearity to make the interpretation of main effects and interactions clearer (Little et al. 2006). Finally, the direct relationships were tested without the moderator, which the results did not show any differences.

## **6.4 Missing Data**

It is important to note that missing data is a serious problem for researchers as it may have negative effects on the analysis and findings. Mostly missing data occurs due to non-response, which can happen due to an intentional decision by skipping some items or unintentionally by forgetting to answer some items (Newman 2014). Additionally, missing data can arise from the researcher part as a result of technical issues. There are several ways for researchers to make sure there is no missing data in responses. For instance, a well-designed questionnaire helps to reduce non-response and pilot testing allows researchers to evaluate the questions and answers which can provide information on the patterns of missing data and consequently can be useful for redesigning the questionnaire (De Leeuw 2001).

As discussed in Chapter 4, this study utilised a third-party company to collect data by using an online survey. Responses to items were 'forced', meaning that the respondents were not able to progress with the questionnaire without answering each item. Consequently, the current study has no missing data. In addition, an attention check question was added which allowed researcher to screen them out prior to analysis.

# **6.5** General Assumptions of the Data

There are some general assumptions made about the data analysed as with any modeling technique. For the present study, most of the measures were collected by utilising Likert-type scales, and these scales presumed to be continuous in nature withing LISREL (Vieira 2011) This is an assumption mostly recognised by researchers when measuring latent variables such

as subjective performance measures (i.e., firm performance) (Albright et al. 2009). This is consistent with the previous research considering similar measurement scales and variables.

Moreover, the assumption of multivariate normality is vital to SEM (Gao et al. 2008). Disregarding this assumption may lead to inaccurate standard errors for individual effects or an inflated estimate of the chi-square (Zhang et al. 2020). As discussed in Chapter 4, for the present study, the data is normally distributed. Thus, the use of maximum likelihood is appropriate for this study.

#### 6.6 Maximum Likelihood vs Restricted Estimation Maximum Likelihood

Maximum likelihood is the most common method of estimation especially when utilising LISREL software as this is a default option on the software package (Schumacker and Lomax 2004). This method is an estimator for normal theory, can be used when the sample size sufficient and observations are independent as well as the model has been properly designed and data is continuous and extracts multivariate normal distribution (Baghdarnia et al. 2014). As discussed in the previous section, for the present study, data is assumed to be continuous, and data is normally distributed. Thus, maximum likelihood has been utilised as an estimation choice.

Moreover, estimation in SEM analysis generates parameter estimates, standard errors, and test statistics that have sufficient sample (Hoyle and Gottfredson 2015). Maximum likelihood is widely used in SEM, which are iterative. They start with searching for parameter estimates which minimises the difference between the observed and implied data with a set of starting values (Hoyle and Gottfredson 2015). These then get updated after each iteration until it is not possible to increase the quality of the estimates which then the estimation is converged. If the estimation is nonconvergent, this could be due to the small sample size as in this case the parameter estimates, and standard errors cannot be calculated (Hoyle and Gottfredson 2015). Given that the sample size is over 100, maximum likelihood is a robust estimator against moderate violations of the multivariate normality (Steenkamp and Van Trijp 1991). As discussed previously, the sample size for the present study is 217, thus utilising maximum likelihood estimator is appropriate in comparison to restricted maximum likelihood estimation.

This estimator can be advantages when analysing a smaller sample size (Hoyle 2012). However, restricted maximum likelihood estimator has limitations such as there is no fixed-effect estimate as the parameters are removed before estimating the components which means that the likelihood ratio test cannot be applied to compare models that includes the fixed-effect parameters (Cheung 2013). Therefore, restricted maximum likelihood estimator can be utilised for multilevel modeling techniques and smaller sample sizes (Hoyle and Gottfredson 2015).

#### **6.7 Model Specification**

As mentioned, and discussed, the present study applied structural equation modeling utilising LISREL 9.3. SEM is a statistical analysis procedure which includes methods such as path analysis and confirmatory factor analysis. The current study applied confirmatory factor analysis which discussed and presented in Chapter 4. CFA allows researchers to examine hypotheses about construct validity by testing the measurement items to assess whether they are measuring what they are supposed to measure which is stated in the theoretical model (Kline 1998). Although, there are now several software packages such as AMOS and Mplus, LISREL was one of the first software that was created to utilise SEM and CFA.

For the current study, by utilising LISREL, firstly the measurement model was analysed, secondly, indicators of the model fit such as chi-square, degree of freedom, and NFI were examined and verified, and lastly structural model was analysed.

### 6.8 Hypotheses Testing

As mentioned above, analysis was conducted via LISREL 9.3 software package. Direct relationships were simultaneously analysed. Below Table 30 and Table 31 show an overview of the findings for all of the hypotheses. Standardised coefficients, standard errors and t-values were examined, and for one directional hypothesis, t-values that are above +/-1.645 indicates a significant relationship (e.g., Oliveira et al. 2018). The more detailed explanation regarding the examined hypotheses is provided below.

**Table 30 Results of Hypotheses** 

Hypotheses	Standardised Coefficient	Standard Error	T-Value
$H_1$	-0.05	0.05	-1.010
$H_2$	0.11	0.02	4.08
$H_3$	0.01	0.04	0.33
$H_4$	0.12	0.02	4.50
$H_5$	0.04	0.02	1.65
$H_6$	1.02	0.09	10.87
$H_7$	0.15	0.01	9.17
$H_8$	0.2	0.02	9.61
$H_9$	0.15	0.01	9.47
$H_{10}$	0.18	0.02	8.44
$H_{11}$	0.18	0.01	9.60
$H_{12}$	0.11	0.06	1.67
Controls (DV: Firm			
Performance)			
Technology Resources	0.32	0.1	3.12
Firm Size	0.44	0.15	2.84
Experience	-0.07	0.09	-0.78
Controls (DV: Social			
<b>CRM Capabilities</b> )			
Technology Resources	-0.14	0.09	-3.18
Firm Size	0.03	0.06	0.68
Experience	-0.00	0.03	-0.23

Hypothesis 1: Innovativeness is positively related to social CRM capabilities.

H1 indicates that there is a non-significant relationship between innovativeness and social CRM capabilities ( $\beta = -0.05$ , T = -1.01). This finding suggests that the innovativeness of the firms does not influence the levels of social CRM capabilities.

Hypothesis 2: Risk-taking is positively related to social CRM capabilities.

H2 is fully supported, as it is demonstrated a significant positive relationship between risk-taking and social CRM capabilities ( $\beta = 0.11$ , T = 4.08). These findings mean that the firms that take risks are positively related to social CRM capabilities.

Hypothesis 3: Proactiveness is positively related to social CRM capabilities.

The model does not support H3 as it has found to be non-significant ( $\beta = 0.01$ , T = 0.33). This finding demonstrates that the proactiveness of the firms do not influence the levels of social CRM capabilities of the firm.

Hypothesis 4: Aggressiveness is positively related to social CRM capabilities.

H4 is fully supported by the model, which demonstrates a significant and direct relationship between aggressiveness and social CRM capabilities ( $\beta = 0.12$ , T = 4.50). This indicates that firms that have higher levels of aggressiveness positively related to social CRM capabilities.

Hypothesis 5: Autonomy is positively related to social CRM capabilities.

H5 is fully supported, as the table indicates, there is a positive significant relationship between autonomy and social CRM capabilities ( $\beta = 0.04$ , T = 1.65). Accordingly, this means that firms that have higher levels of autonomy positively related to social CRM capabilities.

Hypothesis 6: Customer-centric management systems is positively related to social CRM capabilities.

H6 is fully supported, as the table indicates, a significant positive relationship has been found between customer-centric management systems and social CRM capabilities ( $\beta = 1.02$ , T = 10.87). This indicates that the firms which have higher levels of customer-centric management systems also have higher levels of social CRM capabilities.

Hypothesis 7: Customer-centric management systems positively moderates the relationship between innovativeness and social CRM capabilities.

H7 is fully supported by the model, which demonstrates that customer-centric management systems positively moderate the relationship between innovativeness and social CRM capabilities ( $\beta = 0.15$ , T = 9.17). These findings indicate that the innovativeness lead to greater levels of social CRM capabilities when firms have higher levels of customer-centric management systems.

Hypothesis 8: Customer-centric management systems positively moderates the relationship between risk-taking and social CRM capabilities.

H8 is also fully supported, as it is indicated in the table below, customer-centric management systems positively moderate the relationship between risk-taking and social CRM capabilities ( $\beta = 0.2$ , T = 9.61). These show that the greater levels of customer-centric managements systems positively influence the firms' risk-taking and its effect on social CRM capabilities.

Hypothesis 9: Customer-centric management systems positively moderates the relationship between proactiveness and social CRM capabilities.

The model finds full support for H9, indicating that customer-centric management systems positively moderate the relationship between proactiveness and social CRM capabilities ( $\beta = 0.15$ , T = 9.47). These findings demonstrate that the proactiveness has a positive relationship to social CRM capabilities in the presence of high levels of customer-centric management systems.

Hypothesis 10: Customer-centric management systems positively moderates the relationship between aggressiveness and social CRM capabilities.

H10 is also fully supported, revealing that customer-centric management systems positively moderate the relationship between aggressiveness and social CRM capabilities ( $\beta = 0.18$ , T = 8.44). These findings demonstrate that the higher levels of customer-centric management systems positively affect the firms' aggressiveness and its influence of social CRM capabilities.

Hypothesis 11: Customer-centric management systems positively moderates the relationship between autonomy and social CRM capabilities.

H11 is fully supported by the model, finding customer-centric management systems positively moderates the relationship between autonomy and social CRM capabilities ( $\beta = 0.18$ , T = 9.60). These findings reveal that the autonomy positively influence social CRM capabilities when firms demonstrate greater levels of customer-centric management systems.

Hypothesis 12: Social CRM capabilities are positively related to firm performance.

H12 is also fully supported, which demonstrates that a positive significant relationship between social CRM capabilities and firm performance ( $\beta = 0.11$ , T = 1.67). These findings reveal that the firms with greater levels of social CRM capabilities indicate higher levels of firm performance.

**Table 31 Hypotheses Significance** 

Hypotheses	Significant	
H <sub>1</sub>	No	
${ m H}_2$	Yes	
$\mathrm{H}_3$	No	
$\mathrm{H}_4$	Yes	
$H_5$	Yes	
$H_6$	Yes	
$\mathrm{H}_7$	Yes	
$\mathrm{H}_8$	Yes	
$H_9$	Yes	
$\mathrm{H}_{10}$	Yes	
$H_{11}$	Yes	
$H_{12}$	Yes	

H1(Innovativeness -> Social CRM capabilities), H2 (Risk-taking -> Social CRM capabilities), H3 (Proactiveness -> Social CRM capabilities), H4 (Aggressiveness -> Social CRM capabilities), H5 (Autonomy -> Social CRM capabilities), H6 (Customer-centric management systems -> Social CRM capabilities) H7 (Inno X CCMS -> Social CRM capabilities), H8 (Risk X CCMS -> Social CRM capabilities), H9 (Pro X CCMS -> Social CRM capabilities), H10 (Agg X CCMS -> Social CRM capabilities), H11 (Aut X CCMS -> Social CRM capabilities), H12 (Social CRM capabilities -> Firm performance)

# **6.9 Addressing Common Method Bias**

Common method variance (CMV) refers to the systematic variance which occurs from the data collection method such as a self-report survey (Simmering et al. 2015). CMV is mostly associated with the artificially inflated relationships between variables (Spector and Brannick 2010). Common method bias can be problematic as they indicate the presence of measurement error which can cause issues with the validity of the variables' relationships between them (Podsakoff et al. 2003). Measurement error have two recognised parts, random and systematic

error. Although both types of measurement errors can cause problems, systematic error especially indicates a serious problem as it signals an issue with the observed relationships between measures of different constructs which is independent of the one that was initially hypothesised (Podsakoff et al. 2003). On the other hand, random errors are presumed to be independent within different measures of the same variable, or measures of different variables in which items that measure the same construct share variance (Baumgartner et al. 2021). It is normal for items to share variance when the underlying trait is the same or related, however if the items share variance as a result of using the same measurement method, then common method variance can occur (Baumgartner et al. 2021)

Furthermore, it is important to understand the reasons causing CMV as it may have a serious effect on the research findings. One of the most common reasons for CMV is that the same respondents answering questions for both independent and dependent variables whilst other reasons can be caused by the measurement items themselves, such as the context of the items within or the context which the measures are collected (Podsakoff et al. 2003). For the current study, the main potential systematic bias that is of concern is relationships being artificially inflated data being collected from the same informants all study measures in the same scale format. As such, post hoc statistical tests were followed to evaluate the presence of common method bias. Firstly, a Harman's single factor test was utilised. This technique indicates CMV if a single factor appears from the factor analysis or if one factor account for the majority of the covariance between the measures (Podsakoff et al. 2003). Results indicated that a total of 45.95 percent variance explained, and the first factor is accounted for under 50 percent, which shows that no one factor emerged from the data. However, although Harman's single factor test is widely used in the marketing literature, it has its limitations. For instance, this technique does not statistically control or partial out method effects but can be used as a diagnostic technique to evaluate the extent to which CMV may be an issue (Podsakoff et al. 2003). Thus, following Lindell and Whitney (2001), this study also applied the marker variable approach to assess the common method variance. This technique is a partial correlation process which is designed to control for common method variance. In this approach, chosen marker variable should be theoretically unrelated to any other variables in the model (Richardson et al. 2009). Accordingly, for the current study, one item has been included as a marker variable capturing respondents views on nature - 'The diversity of nature must be valued and protected'. Within

this technique, the smallest correlation between the observed variables provides a reasonable justification for CMV (Lindell and Whitney 2001). This is because an uncorrected correlation can be influenced by CMV and the smallest value in the correlation matrix can be an estimate of CMV. For the current study, smallest correlation is 0.002 between the marker item and aggressiveness. Hence this was used for adjusting the correlation matrix (

Table 32). The adjusted correlation matrix (Table 33) did not indicate any significant changes. To further evaluate the potential presence of CMV, the second smallest correlation was also used. The second smallest correlation is 0.096 between the marker item and autonomy. Again, the adjusted correlation matrix (Table 34) did not demonstrate any significant changes, thus providing evidence that common method variance is not a concern for the present study.

**Table 32 Original Correlation Matrix** 

# **Correlations**

	Mean	SD												
			EOINN	EORI	EOPRO	EOAGG	EOAUT	SCRM	CCMS	FP	TECRES	EXP	SIZE	MARKER
EOINN	5.58	1.32	1											
EORI	4.81	1.76	.643**	1										
EOPRO	5.43	1.35	.773**	.660**	1									
EOAGG	4.17	1.71	.344**	.473**	.459**	1								
EOAUT	4.45	1.67	.528**	.585**	.581**	.564**	1							
SCRM	5.13	1.50	.544**	.523**	.527**	.462**	.542**	1						
CCMS	5.59	1.26	.659**	.430**	.615**	.310**	.525**	.700**	1					
FP	5.40	1.34	.541**	.433**	.520**	.264**	.440**	.249**	.357**	1				
TECRES	5.77	1.13	.517**	.378**	.487**	.291**	.418**	.576**	.653**	.297**	1			
EXP	2.95	1.39	.053	.066	.008	.065	.015	063	046	.064	.003	1		
SIZE	2.78	1.08	.140*	.041	.086	.136*	.046	.055	.049	.251**	.038	.212**	1	
MARKER		** C	.295**	.117	.276**	.002	.096	.155*	.226**	.149*	.315**	.021	.084	1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

**Table 33 Adjusted Correlation Matrix** 

# **Correlations**

	EOINN	EORI	EOPRO	EOAGG	EOAUT	SCRM	CCMS	FP	TECRES	EXP	SIZE	MARKER
EOINN	1	EUKI	EUFKU	EUAGG	EUAUI	SCRIVI	CCIVIS	ΓΓ	TECKES	EAF	SIZE	WARRER
EORI	.641**	1										
EOPRO	.771**	.658**	1									
EOAGG	.342**	.471**	.457**	1								
EOAUT	.526**	.583**	.579**	.562**	1							
SCRM	.542**	.521**	.525**	.460**	.540**	1						
CCMS	.657**	.428**	.613**	.308**	.523**	.698**	1					
FP	.539**	.431**	.518**	.262**	.438**	.247**	.355**	1				
TECRES	.515**	.376**	.485**	.289**	.416**	.574**	.651**	.295**	1			
EXP	.051	.064	.006	.063	.013	061	044	.062	.001	1		
SIZE	.138*	.039	.084	.134*	.044	.053	.047	.249**	.036	.210**	1	
MARKER	.295**	.117	.276**	.002	.096	.155*	.226**	.149*	.315**	.021	.084	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

**Table 34 Second Adjusted Correlation Matrix** 

# **Correlations**

	EOINN	EORI	EOPRO	EOAGG	EOAUT	SCRM	CCMS	FP	TECRES	EXP	SIZE	MARKER
EOINN	1											
EORI	.553**	1										
EOPRO	.683**	.570**	1									
EOAGG	.254**	.383**	.369**	1								
EOAUT	.438**	.495**	.491**	.474**	1							
SCRM	.454**	.433**	.437**	.372**	.452**	1						
CCMS	.569**	.340**	.525**	.220**	.435**	.610**	1					
FP	.451**	.343**	.430**	.174**	.350**	.159**	.267**	1				
TECRES	.427**	.288**	.397**	.201**	.328**	.486**	.563**	.207**	1			
EXP	037	024	082	025	075	.153	.044	026	087	1		
SIZE	.05*	049	0	.046*	044	035	041	.161**	052	.122*	1	
MARKER	.295**	.117	.276**	.002	.096	.155*	.226**	.149*	.315**	.021	.084	1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

# **6.10 Chapter Summary**

This chapter was the last chapter discussing analysis. In this chapter, analytic decisions were discussed. To begin with, the present study utilised covariance based structural equation modeling in contrast to partial least squares based structural equation modeling. It was concluded that utilising factor or covariance-based framework was more appropriate for the current. This study also utilised confirmatory factor analysis and an estimator of maximum likelihood. This is because the sample size and the normality of the data are appropriate to utilise these techniques. In addition, this chapter included the hypotheses testing where the t-values indicated the significance of each hypothesis and detailed explanation was provided. Lastly, common method bias was discussed, and it was concluded that for the present study common method variance was not a concern. The next chapter discusses the findings and provides empirical results.

# **CHAPTER 7: DISCUSSION AND CONCLUSION**

#### 7.1 Chapter Introduction

The previous chapter provided the results of data analysis, testing and detailing the significance of each hypothesis in the research model. This chapter examines these findings in the context of previous literature, determining the contributions to both theory and practice. It is structured into four main sections; firstly, an interpretation of the analysis, secondly, contributions to theory, thirdly, implications for practice, and lastly, limitations of the study with future research recommendations are discussed. This chapter starts with an overview of the empirical findings to set the stage for subsequent discussion.

## 7.2 Discussion on Empirical Framework

This study aimed to examine the relationship between entrepreneurial orientation and social CRM capabilities, with the outcome of firm performance through the lenses of RBV, dynamic capabilities and effectuation theories. Referring back to this study's objectives:

- 1. Empirically examine the relationship between entrepreneurial orientation and social CRM capabilities in the B2B context
- 2. Empirically understand the influence of social CRM capabilities on firm performance in the B2B context
- 3. Empirically examine the impact of customer-centric management systems on entrepreneurial orientation and social CRM capabilities relationship in the B2B context

The first objective aimed to examine the relationship between entrepreneurial orientation and social CRM capabilities. Entrepreneurial orientation is firms' strategic approach, which reflects how firms structures themselves to identify and capitalise on market opportunities (Wiklund and Shepherd 2003). It signifies the process aspect of entrepreneurship as it relates to the

methods, practices and decision-making styles managers use to act entrepreneurially (Lumpkin and Dess 1996). This expectation is underpinned by the effectuation theory, which offers a perspective on how entrepreneurs make decisions in the uncertain and unpredictable environments. Effectuation assumes that under the uncertain and unpredictable conditions, entrepreneurs adopt effectual decision-making logic (Laskovaia et al. 2019). As discussed, Turkey is considered to be an unstable environment mainly due to the political and economic factors with the inflation rate of 61.5% as of September 2023 (Statista 2023). Therefore, building on this logic, for the current study, entrepreneurs are considered to have an effectual approach rather than a causal approach. Effectual entrepreneurs, who are characterised by their ability to adapt, experiment, and leverage resources to create opportunities, tend to implement new technologies within their firms (Sarasvathy 2001). This is because in comparison to causal logic, effectual entrepreneurs are more likely to adapt to changes in technology due to their flexible mindset. Moreover, entrepreneurial orientation involves processes such as experimenting with new technologies, seizing new opportunities, and having tendency to undertake risky ventures (Lumpkin and Dess 1996), which are all in line with the effectual logic. The present study examines the positive relationship between entrepreneurial orientation and social CRM capabilities. This is theoretically underpinned by the effectuation theory. The positive relationship is expected due to the firms with high entrepreneurial orientation are more likely to adopt and experiment with new technologies, therefore it is expected for these firms to have higher levels of social CRM capabilities.

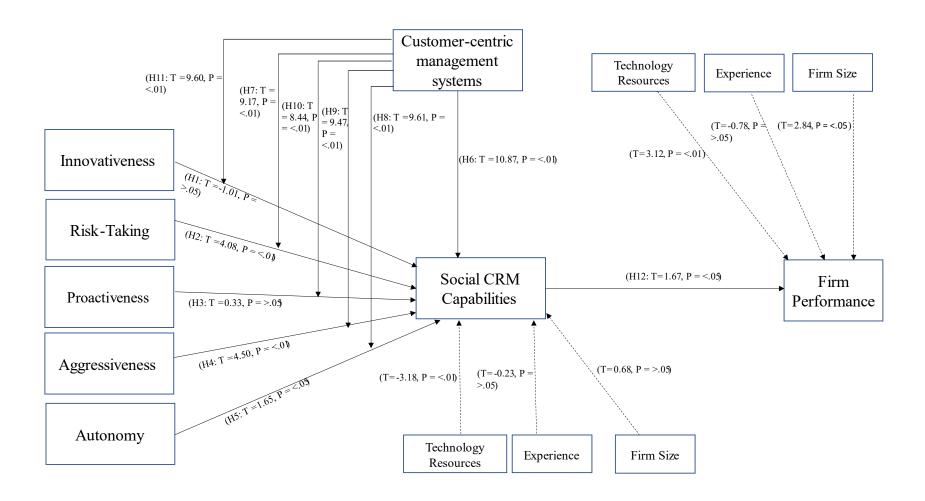
The second objective aimed to examine the relationship between social CRM capabilities and firm performance. This relationship is underpinned by dynamic capabilities theory. It has been highlighted in the literature that the development of distinctive capabilities can lead to enhanced firm performance (Diffley and McCole 2015). In line with the previous research and dynamic capabilities theory, this relationship is expected to be positive (Bhatti et al. 2019; Wang and Kim 2017).

The final objective of this study was to examine the interacting role of customer-centric management systems on entrepreneurial orientation and social CRM capabilities. Customer-centric management systems are organisational resources (Trainor et al. 2014), that are designed to effectively manage customer relationships and gain competitive advantage. As discussed, for firms to achieve competitive advantage and enhanced firm performance,

resources and capabilities should be combined. However, entrepreneurs' decision-making styles (i.e., effectual, or causal) should also be considered, as this can impact the implement of new technologies within the firms. From the theoretical perspective, RBV and dynamic capabilities theories, though well-established, are not sufficient to examine complex relationships particularly in the complex B2B context (Mero and Haapip 2022). Building on this logic, the interacting role of customer-centric management systems are expected to have positive effects on the relationship between entrepreneurial orientation and social CRM capabilities. This is because entrepreneurial orientation is a strategy that demands significant resources, can show difficulties in the resource-limited environment, which characterises an economy experiencing an economic crisis (Laskovaia et al. 2019). However, firms that adopted effectual logic can have better performance outcomes when the firms have implemented entrepreneurial orientation (Covin and Slevin 1989). Thus, effectual decision-makers are more likely to utilise existing resources such as customer-centric management systems, to take advantage of the opportunities in the environment (Cai et al. 2017). The empirical model is provided in Figure 11, which shows the hypothesised results and the control paths.

Figure 11 Empirical Framework

Empirical Results of Hypothesised Model



**Table 35 Empirical Results of Hypothesised Relationships** 

Hypotheses		Standardised Coefficient		Standard Error		T-Val	ue P-Value	
H <sub>1</sub>		-0.05		0.05	0.05		> .05	
$H_2$		0.11		0.02		4.08	< .01	
$H_3$	$H_3$ 0.01			0.04		0.33	> .05	
$H_4$	$H_4$ 0.12			0.02		4.50	< .01	
$H_5$		0.04		0.02	0.02		< .05	
$H_6$		1.02		0.09	0.09		< .01	
$H_7$		0.15		0.01	0.01		< .01	
$H_8$		0.2		0.02	0.02		< .01	
$H_9$		0.15		0.01	0.01		< .01	
$H_{10}$ 0.18		0.18		0.02		8.44	< .01	
$H_{11}$		0.18		0.01		9.60	< .01	
$H_{12}$		0.11		0.06	0.06		< .05	
Controls (DV	: Firm							
Performance)	)							
Technology Resources		0.32		0.1		3.12	< .01	
Firm Size		0.44		0.15		2.84	< .05	
Experience		-0.07		0.09		-0.78	> .05	
Controls (DV	: Social							
CRM Capabi	lities)							
Technology Resources		-0.14		0.09		-3.18	< .01	
Firm Size		0.03		0.06	0.06		> .05	
Experience		-0.00		0.03	0.03		> .05	
Fit Indices:	Chi - Square = 1571.59,	Df = 932 (p = 0.00),	RMSEA = 0.056	CFI = 0.979	NFI = 0.956	NNFI = 0.975	Standardised $RMR = 0.0679$	$R^2 = 0.195$

# 7.3 Discussion on the Hypothesised Results

### 7.3.1 Hypothesis 1: Innovativeness is positively related to social CRM capabilities

This present study has found that innovativeness does not influence the levels of social CRM capabilities ( $\beta$  = -0.05, T = -1.0, P = >.05). This might be due to the context of B2B firms, social media can be a tool for innovation, however it might be limited to specific aspects such as networking and information gathering, rather than directly influencing social CRM capabilities (Järvinen et al. 2012). Innovativeness indicates a firm's readiness to change existing norms and adopt new concepts (Baker and Sinkula 2009). It represents firm's pursuit of new opportunities and solutions, includes creativity, experimentation, technological advancement, originality, and R&D activities that lead to the enhancement of products and

services (Hughes and Morgan 2007; Dess and Lumpkin 2005). Although prior research has not examined the relationship between innovativeness and social CRM capabilities, it has been highlighted in the literature that innovativeness can lead to the development of new organisational skills via trial and error, and creativity (Alegre et al. 2012; Covin et al. 2006), which is in line with the experimentation aspect of the effectual theory (Mthanti and Urban 2014). Prior research has shown that adopting a means-driven approach positively influences the outcomes of R&D activities, especially in projects characterised by high innovativeness (Bruttel et al. 2012). This present study has found that innovativeness does not influence the levels of social CRM capabilities ( $\beta = -0.05$ , T = -1.01). This might be due to the context of B2B firms, social media can be a tool for innovation, however it might be limited to specific aspects such as networking and information gathering, rather than directly influencing social CRM capabilities (Järvinen et al. 2012).

#### 7.3.2 Hypothesis 2: Risk-taking is positively related to social CRM capabilities

The results support hypothesis 2 ( $\beta$  = 0.11, T = 4.08, P = < .01), concluding that firms with higher levels of risk-taking can achieve stronger levels of social CRM capabilities. This is in line with effectuation theory, as it emphasises experimenting with new technologies and innovations in uncertain conditions which is particularly valuable in the dynamic environments (Read et al. 2009). Risk-taking involves engaging in high-risk activities with opportunities of high returns, and risky actions in uncertain environments (Lomberg et al. 2017). Risk-taking involves accepting the uncertainty and utilising resources to uncertain outcomes (Hughes and Morgan 2007). Prior literature highlights that firms with higher levels of risk-taking are more likely to seize opportunities (Li et al. 2009), which leads to positive outcomes of success (Frese et al. 2002; Lumpkin and Dess 1996). Social media can be considered as an opportunity as discussed it can significantly benefit firms (Siamagka et al. 2015).

# 7.3.3 Hypothesis 3: Proactiveness is positively related to social CRM capabilities The results show that the relationship between proactiveness and social CRM capabilities is not significant for the present study ( $\beta = 0.01$ , T = 0.33, P = > .05). This might be because

where firms search for new opportunities, which may not be related to the present line of operations (Venkataraman and Sarasvathy 2005). Proactiveness is the opportunity-seeking behaviour that creating first-mover advantages ahead of competitors and seeking market leadership positions (Lomberg et al. 2017; Anderson et al. 2015). Proactive firms are more likely to adopt new technologies in comparison to their competitors. This is because proactive firms are encouraged to experiment with new technologies and undertake experimentation (Anderson et al. 2009). However, firms that are in emerging markets and under uncertain conditions operate under resource constraints. Therefore, being a first mover in new technology adoptions and utilising resources may be considered as a risky move, where firms may rather mimic their competitors.

#### 7.3.4 Hypothesis 4: Aggressiveness is positively related to social CRM capabilities

Aggressiveness indicates firms' ability to outperform competitors via dynamic response to competitor's actions (Lumpkin and Dess 2001). It refers to how firms respond to competitive trends in the existing marketplace (Li et al. 2009). In line with the effectual theory, which emphasises entrepreneurial approaches that are adaptive, flexible, and opportunistic (Sarasvathy 2001). With this in mind, aggressiveness involves actively responding to and capitalising on existing and new market opportunities. Prior literature revealed that continuous competition between firms for a competitive advantage will lead to position of competitive advantage in the marketplace (Hunt and Morgan 1997; Hunt and Morgan 1996; Hunt 1995). Additionally, it has been highlighted in the literature that firms in uncertain environments, and particularly in the B2B context, where competition for customers and resources are intense, are more likely to benefit from aggressiveness (Lumpkin and Dess 2001). In line with these, the results support hypothesis 4 ( $\beta = 0.12$ , T = 4.50, P = < .01), concluding that firms with higher levels of aggressiveness can achieve stronger levels of social CRM capabilities. B2B firms operate in a dynamic environment, particularly in an emerging market, where the market is not stable, and the resources are limited in comparison to stable markets. This means that firms have to be in a constant competition, in the context of social CRM, this can be explained via the importance of staying relevant and capitalising on the new opportunities such as social CRM.

#### 7.3.5 Hypothesis 5: Autonomy is positively related to social CRM capabilities

The present hypothesis is supported, showing autonomy is positively related to social CRM capabilities ( $\beta$ = 0.04, T = 1.65, P = < .05). This means that firms with higher level of autonomy have stronger social CRM capabilities. Autonomy refers to the extent to which individuals or teams within a firm are empowered to make independent decisions and take initiative without the need for constant supervision or approval (Lumpkin and Dess 1996). To researcher's knowledge, the relationship between autonomy and social CRM capabilities have not been examined. However, autonomy provides freedom to make quick and independent decisions (Lumpkin and Dess 1996), thus autonomous entrepreneurs are more likely to implement new technologies.

# 7.3.6 Hypothesis 6: Customer-centric management systems is positively related to social CRM capabilities

The hypothesis is supported by this study ( $\beta$  = 1.02, T = 10.87, P = < .01), concluding that higher levels of customer-centric management systems positively influence the levels of social CRM capabilities. This is in line with the previous literature, where it was emphasised that customer-centric management systems have a direct positive influence on social CRM capabilities particularly in the B2B context (Trainor et al. 2014). Customer-centric management systems are characterised by the degree to which firms modify and customise their business processes and systems to emphasise and prioritise customer requirements (Jayachandran et al. 2015). Existing research in CRM literature indicates that customer-centric management systems play a crucial role in supporting firm's customer-oriented cultures, compromising both structural and technological components to ensure organisational activities are driven by customer needs (Kim et al. 2012; Hillebrand et al. 2011; Reimann et al. 2010). This study confirms that these results are also relevant to emerging markets, in this study's context.

7.3.7 Hypothesis 7: Customer-centric management systems positively moderates the relationship between innovativeness and social CRM capabilities

Hypothesis 7 is supported by this study ( $\beta = 0.15$ , T = 9.17, P = < .01), referring that innovativeness positively influences social CRM capabilities in the presence of customercentric management systems. Although the results showed insignificance when examined the direct relationship between innovativeness and social CRM capabilities, when combined with customer-centric management systems, results reveal the positive influence on social CRM capabilities. This is because in the presence of customer-centric management systems, innovativeness can be more effectively channelled towards improving social CRM capabilities. Innovations are more likely to be aligned with customer needs and preferences, ensuring that new initiatives in social CRM are relevant and impactful. Additionally, as the results suggest the combination of innovativeness and customer-centric management systems lead to higher levels of social CRM capabilities. For example, innovative social media tools or analytics platforms can be used to offer personalised experiences to customers, engage with them more meaningfully, and efficiently manage customer relationships on social media platforms. This is in line with the prior study (Trainor 2012), where it was highlighted that innovations in customer service processes or communication methods can be quickly integrated into social CRM platforms, making these innovations more responsive and adaptable to changing customer expectations (Trainor 2012).

7.3.8 Hypothesis 8: Customer-centric management systems positively moderates the relationship between risk-taking and social CRM capabilities

Hypothesis 8 is also supported by this study, ( $\beta$  = 0.2, T = 9.61, P = < .01), concluding that greater levels of customer-centric managements systems positively influence the risk-taking and social CRM capabilities relationship. This is because customer-centric approach equipes firms with insights which are essential for mitigating risks in new ventures (Kohli and Jaworski 1990). Results show that B2B firms in Turkey that are equipped with customer-centric managements systems, are likely to undertake risk that supports the development of stronger customer relationships. Particularly, in emerging markets, the market dynamics are characterised by their rapid changes, evolving customer behaviour, and digital transformation (Sheth 2011), therefore firms that are more customer-focussed take risks to develop and utilise

social CRM capabilities to quickly response to market changes, and to stay ahead of the competition.

7.3.9 Hypothesis 9: Customer-centric management systems positively moderates the relationship between proactiveness and social CRM capabilities

The present hypothesis is supported by this study ( $\beta$  = 0.15, T = 9.47, P = < .01), which shows that proactiveness positively influences social CRM capabilities in the presence of customercentric management systems. Although the direct relationship has proven to be insignificant, the results in the presence of customer-centric management systems suggest that firms that are both proactive and equipped with customer-centric management systems are better positioned to leverage social CRM to respond to market changes and engage with customers effectively. This shows that, particularly in emerging markets firms are more customer-centric look at the opportunities to enhance the customer experiences, which social CRM can aid to achieve.

7.3.10 Hypothesis 10: Customer-centric management systems positively moderates the relationship between aggressiveness and social CRM capabilities

Hypothesis 10 is also supported by this study ( $\beta$  = 0.18, T = 8.44, P = < .01), reflecting that higher levels of customer-centric management systems positively affect the firms' aggressiveness and its influence of social CRM capabilities. In line with the prior literature, customer-centric management systems allow that firms aggressive strategies are aligned with customer needs and preferences, which enhances the impact of social CRM capabilities as it ensures that competitive strategies are also customer-focussed (Shah et al. 2006). In emerging markets, where the market is unstable, a customer-centric approach helps firms to adapt their social CRM strategies to customer feedback and behaviours more effectively (Trainor et al. 2014). In conditions such as rapid market changes, customer-centric approach enhances the aggressive strategies as this enable firms to remain relevant and responsive to market changes. Thus, B2B firms that are customer-focussed and utilises aggressive strategies implement and utilise social CRM to outperform their competitors by making more informed decisions, which are provided by the customer-centric management systems.

7.3.11 Hypothesis 11: Customer-centric management systems positively moderates the relationship between autonomy and social CRM capabilities.

The result supports hypothesis 11 ( $\beta$  = 0.18, T = 9.60, P = < .01), revealing that the autonomy positively influences social CRM capabilities when firms demonstrate greater levels of customer-centric management systems. This is because autonomy within customer-centric approach encourages a deeper understanding of customer behaviours and preferences. Firms that have higher levels of autonomy are closer to the market and gather and act on customer insights more effectively (Morris et al. 2011), thus enhancing the overall levels of social CRM capabilities. This is due to the empowered individual or team engage more with customers as they have access to information through customer-centric management systems and the authority to act on it, which enhances customer experiences (Menon et al. 1999). Particularly, in emerging markets where there are high levels of unpredictability, firms need to be quick to respond to customer needs, autonomous firms that are equipped with customer-centric approach are able to respond to customer feedback and market shifts as they are able to track these via social media, therefore enhancing social CRM capabilities.

#### 7.3.12 Hypothesis 12: Social CRM capabilities are positively related to firm performance

Social CRM capabilities enable firms to gain deeper insights into customer needs and preferences, leading to stronger customer relationships (Trainor et al. 2014). From the dynamic capabilities' perspective, firms that effectively utilising internal resources can achieve enhanced performance outcomes (Teece 2018). Dynamic capability theory has its foundations on the RBV, which can explain the relationship between social CRM capabilities and firm performance. For instance, a raw resource, social media, need to be utilised with an existing organisational capability, CRM, to achieve enhanced firm performance (Harrigan et al. 2020). Consistent with the RBV and dynamic capabilities theories, and with the previous study, which found a positive relationship between social CRM capabilities and firm performance (Wang and Kim 2017), this study also finds support for this hypothesis ( $\beta = 0.11$ , T = 1.67, P = < .05), which reveals that firms with higher levels of social CRM capabilities achieve enhanced firm performance. This finding is also consistent with other prior research, where it was highlighted that marketing capabilities have a positive influence on firm performance (e.g., Shin 2013; Morgan et al. 2009). Additionally, it was also revealed that CRM capabilities have an

opportunity to enhance firm performance (Foltean et al. 2019; Coltman 2007). Thus, this study confirms that social CRM capabilities enhance B2B firm's performance in emerging markets.

#### 7.4 Discussion of Control Paths

This section aims to explore how various external variables might affect the model examined in this study. As outlined in Chapter 2, the relationship between internal resources such as social media technology use, technology resources, organisational resources and social CRM has been examined in existing literature. Consequently, numerous factors could potentially impact the relationship, based on the theories derived from the findings. While these relationships are not hypothesised as these are the control variables, it is crucial to confirm that the resulting relationships tested remain unaffected despite these external variables, which allows to ensure that the results of the study are valid and reliable.

Firstly, the relationship between technology resources and firm performance was examined. It has been highlighted in the literature that technology resources alone are not sufficient to lead to enhanced performance (Chang et al. 2010; Borges et al. 2009; Coltman 2007; Melville et al. 2004; Bharadwaj 2000). However, the current study has found a positive relationship between technology resources and firm performance ( $\beta = 0.32$ , T = 3.12 P = < .01), concluding that, indeed, technology resources can lead to enhanced firm performance. This might be due to the context of this study, emerging market, which can be explained through effectuation theory. Effectual logic emphasises on utilising existing resources to create new opportunities in uncertain conditions; thus, technology resources can become key means that firms leverage to creatively innovate, solve problems, and explore new markets, resulting to achieve enhanced firm performance. The relationship between technology resources and social CRM capabilities were also examined. The results revealed that technology resources negatively influence the social CRM capabilities in this present study ( $\beta = -0.14$ , T = -3.18 P = < .01). In line with the RBV theory, resources to provide benefits, they must be valuable, rare, inimitable, and nonsubstitutable (Barney 1991). In this context, technology resources may not effectively align with the firms' core competencies or existing resource base, which can explain the negative relationship. Additionally, dynamic capabilities emphasise the firm's ability to integrate, build, and reconfigure internal and external resources to address rapidly changing environments

(Teece et al. 1997). Technology resources rapidly evolve, and as discussed B2B firms in emerging markets may have limited resources, thus they may struggle to implement these changes, leading to a misalignment between the firm's resources and its impact on developing higher levels of social CRM capabilities.

Furthermore, firm size demonstrated a positive relationship on firm performance ( $\beta = 0.44$ , T = 2.84 P = < .05). The result is not surprising, as larger firms typically have more resources at their disposal, which allows them to invest more in research and development, marketing, and other key areas that can lead to better performance. The result is consistent with the previous studies that examined the relationship between firm size and firm performance (i.e., Gaur and Gupta 2011; Lee 2009). In addition, firm size demonstrated a non-significant relationship on social CRM capabilities ( $\beta = 0.03$ , T = 0.68 P = >.05), which concludes that firm size does not have an influence on the levels of social CRM capabilities. This might be due to the nature of B2B relationships, which are mostly long-term and based on personalised interactions, may not be significantly enhanced by firm size. Indeed, larger firms may have more resources to allocate towards social CRM initiatives, however smaller firms might be more adaptable and flexible in implementing new strategies, can be particularly beneficial in rapidly changing market conditions. Lastly, experience in using social media demonstrated a non-significant relationship on firm performance and social CRM capabilities ( $\beta = -0.07$ , T = -0.78 P = > .05;  $\beta = 0$ , T = -0.23 P = > 05.). As this scale measured the duration of firms using social media, this might be due to the fact that effectiveness of using social media is not necessarily based on the experience of firms, but rather their efficient use of social media. As highlighted in the literature (e.g. Cartwright et al. 2021, Andersson and Wikström 2017), B2B firms often face challenges in effectively utilising social media due to their expertise. This suggests that experience does not always equate to effectiveness. Instead, the effectiveness of social media is more closely linked to strategic and efficient use rather than the length of experience with the platform.

Overall, to conclude, importantly, the relationship between core variables have not changed when these controls were included. These factors did not impact the relationships, resulting that relationships tested remain unaffected regardless of these control variables.

#### 7.5 Overall Discussion of Results

This study examined the relationship between entrepreneurial orientation and social CRM capabilities, and the moderating role of customer-centric management systems in this relationship. Additionally, this study investigated the relationship between social CRM capabilities and firm performance. The results from this study shed new light on antecedents of social CRM capabilities, the positive moderating role of customer-centric management systems on entrepreneurial orientation and social CRM capabilities is also demonstrated. Additionally, the results also show a positive direct relationship between customer-centric management systems and social CRM capabilities. Lastly, social CRM capabilities is exhibited a positive influence on firm performance.

Entrepreneurial orientations focus on how firms operates rather than what it does, such as firm's strategic orientation and decision-making styles (Lumpkin and Dess 1996). Literature highlights that firms that exhibit higher degree of entrepreneurial orientation prioritise innovation, actively seek out opportunities, and tend to embrace risk, especially in uncertain environments (Covin et al. 2020; Miller 1983). For these firms, the uncertainty of the future is viewed not as a challenge but as a canvas realising new opportunities (Karami and Read 2021; Alvarez and Barney 2007). This is in line with the effectuation theory, where highlights that in uncertain environments future is not planned but created through entrepreneurial actions (Cowden et al. 2022; Welter and Kim 2018). Considering that Turkish B2B firms operate in uncertain and dynamic environments, this approach allows firms to adapt to constant changes and explore new opportunities without the precommitment. Developing social CRM capabilities in uncertain environments is considered to be challenging due to the constant market changes, market volatility, technological advancements and shifts in customer behaviours. Therefore, firms need to be equipped with agility and flexibility to be able to quickly adapt their social CRM strategies in response to changing market conditions. As discussed, this approach requires entrepreneurs to have an effectual logic, which in the context of this study, this is assumed as it has been highlighted in the literature (Laskovaia et al. 2019). Although, the previous literature revealed that innovativeness, proactiveness, and risk taking have positive influences on digital technologies (Hervé et al. 2021), to date there is no literature on entrepreneurial orientation in the context of social CRM capabilities particularly in uncertain market environments. The findings of the current study, regarding the entrepreneurial orientation and social CRM capabilities reveal that not every dimension of entrepreneurial orientation is significant to the levels of social CRM capabilities firms have. While autonomy, risk-taking, and aggressiveness have positive relationships to social CRM capabilities, innovativeness and proactiveness are non-significant in the present study. In the context of Turkish B2B firms, the lack of a direct relationship between innovativeness and proactiveness, and social CRM capabilities can be attributed to several factors specific to the market dynamics, cultural aspects, business practices. To elaborate, the Turkish market, can be characterised by a higher degree of uncertainty and less predictability. Under these conditions, B2B firms can be reluctant to invest heavily in social CRM activities, which prevent the firms to develop higher levels of social CRM capabilities. Additionally, B2B firms operate in dynamic markets, where social media is considered to be a tool for innovation, however the role of social media can be limited, thus reducing the influence of innovativeness on social CRM capabilities. Also, firms in emerging markets face resource limitations. Consequently, being proactiveness and allocating more resources to these initiatives can be perceived as a high-risk strategy, leading firms to instead follow the actions of their competitors.

Furthermore, customer-centric management systems enable firms to gather data and analyse a wide range of customer data. Previous literature highlighted that customer-centric management systems are considered to be an organisational resource (Trainor et al. 2014), which supports a customer-oriented culture within a firm, comprising both structural and technological components that guide organisational actions to be aligned with customer needs (Kim et al. 2012; Hillebrand et al. 2011; Reimann et al. 2010). Unsurprisingly, this study finds a positive relationship between customer-centric management systems and social CRM capabilities. This is consistent with the previous research (Trainor et al. 2014), where the authors found customer-centric management systems are an important driver for social CRM capabilities in the B2B context. This finding reflects that the relational nature of B2B relationships, which is based on long-term relationships. In this case, customer-centric management systems increase the levels of social CRM capabilities as it allows firms to provide a comprehensive view of customers, enables personalised engagement, and supports continuous improvement based on customer feedback.

Another important finding is the examination of the interactive effects of customer-centric management systems and entrepreneurial orientation on social CRM capabilities. The results indicate the customer-centric management systems positively moderates the relationship between entrepreneurial orientation and social CRM capabilities. This is in relation to all dimensions of entrepreneurial orientation, which indicates that although the direct relationship between innovativeness/proactiveness were found to be non-significant, in the presence of customer-centric management systems, these relationships are positive. In this context, it means that the effectiveness of a firm's innovativeness and proactiveness depend on the firm's implementation of customer-centric management systems. From the perspective of innovativeness, this is because a customer-centric approach aligns the innovative efforts of firms with the evolving needs and preferences of customers, which is crucial for having higher levels of social CRM capabilities. Effective use of customer-centric management systems can provide valuable insights, which can shape the innovativeness under entrepreneurial orientation, leading to developing stronger social CRM capabilities. In addition, theoretically, customer-centric management systems enable firms to better understand and anticipate customer needs and preferences. This understanding can shape the firm's proactive strategies under entrepreneurial orientation, allowing that these strategies are not just forward-looking but are also aligned with actual customer expectations, which is crucial to for developing higher levels of social CRM capabilities. To summarise, entrepreneurial orientation can drive firms to innovative and proactive engagement with customers, however, in this context, this can only be achieved in the presence of customer-centric management systems as such systems provide the structural and technological support to utilise these engagements effectively.

From the theoretical perspective, the positive moderating role of customer-centric management systems on entrepreneurial orientation and social CRM capabilities relationship can be explained through the RBV and effectuation theories. From the RBV perspective, this suggests that the combination of entrepreneurial orientation and an organisational resource-customer-centric management systems- is a vital strategic resource, particularly in emerging markets where understanding and rapidly responding to customer needs can be a key differentiator. RBV theory suggests that firms' assets, attributes, and other factors that are controlled by the firm such as the decision-making logic, which can be used to implement strategies to achieve a competitive advantage (Varadarajan 2020). Previous social CRM literature has ignored the decision-making logics, which is the foundation of effectual theory. From this perspective,

entrepreneurial orientation, and capabilities in B2B firms can be seen as a process iterative learning and adaptation, where resources are dynamically aligned with market needs. Customer-centric management systems play a critical moderating role as these systems provide the necessary insights and feedback from customers, which are essential for making informed, adaptable decisions in line with entrepreneurial orientation characteristics. This is particularly significant in emerging markets, where customer needs and market dynamics are highly unpredictable. Results show that adopting an effectual approach, B2B firms with a strong entrepreneurial orientation utilise their customer-centric management systems to enhance their social CRM capabilities and turning unpredictability into an opportunity. This is in line with the effectuation theory, which emphasises using available means to create opportunities. In this context, customer-centric management systems can be considered as available means such as customer insights, which helps firms with strong entrepreneurial orientation to leverage customer relationships and lead to stronger social CRM capabilities.

Lastly, this study also examined the relationship between social CRM capabilities and firm performance. The positive result indicates that social CRM capabilities lead to enhanced firm performance. This is consistent with the previous study, where a positive relationship was found between social CRM capabilities and firm performance in the US (Wang and Kim 2017). The results show that this also applies to emerging markets, where market is unstable. This is in line with the RBV and dynamic capabilities, which highlights the importance of developing distinctive capabilities can enhance the firm performance (Menguc and Auh 2006; Day 1994). From there, it is important to discuss the theoretical and practical contributions that the current study contributes to marketing literature, which is discussed in the following sections.

#### 7.6 Theoretical Contributions

This study offers several contributions to social CRM and entrepreneurial orientation literature. Firstly, previous literature in social CRM mainly built on the RBV and dynamic capabilities theories (i.e., Harrigan et al. 2020; Bhatti et al. 2019; Wang and Kim 2017; Choudhury and Harrigan; 2014; Trainor et al. 2014). Although these studies have examined some antecedents to social CRM such as social media technology use, customer-centric management systems, the current literature ignored the entrepreneurs' decision-making logics, which is crucial to

understand particularly in the B2B context and in rapidly changing environmental conditions. This current study is the first study to examine the relationship between entrepreneurial orientation and social CRM capabilities. Additionally, this study draws from the RBV and dynamic capabilities theories, which is in line with the prior literature. Although these theories highlight the importance of firms' resource management, competitive advantage and firm performance, these theories have limitations, which effectuation theory can offer complementary insights. Both RBV and dynamic capabilities theories mainly highlights leveraging existing resources to achieve competitive advantage and eventually firm performance. However, these theories are less equipped to address the high levels of uncertainty and unpredictability in entrepreneurial and rapidly changing environments. Effectuation theory can fill this gap as it focuses on the adaptation to unexpected situations and creating opportunities in uncertain market conditions. Therefore, this study also draws from the effectuation theory, which is among the first to add important foundations to effectuation in developing social CRM capabilities in an emerging market. This study contributes to theory by extending on the social CRM capabilities literature from a different theory perspective. As the findings suggest, entrepreneurs decision-making logic is important and should be combined with organisational resources to achieve stronger capabilities. Therefore, firm's existing resources should also align with the entrepreneur's decision-making, suggesting that effectuation and RBV theories should support each other to achieve stronger capabilities and eventually enhanced firm performance. Based on the findings, this study views social CRM capabilities as a combination firm's entrepreneurial mindset and customer-centric management systems that can lead to enhanced firm performance. Similar to the definition of Trainor et al. (2014, p. 1202) "a unique combination of emerging technological resources and customercentric management systems that can lead to customer satisfaction, loyalty, and retention", this study further extends the social CRM literature by incorporating firm's entrepreneurial orientation and their effectual logic.

Secondly, despite the increased attention in both academia and the industry, social CRM is still a new phenomenon which is underexplored (Yasiukovich and Haddara 2021). Thus, there is a paucity of knowledge on social CRM capabilities (Kim and Wang 2019). Thus, this study extends the knowledge on social CRM capabilities and contributes to social CRM capabilities literature by examining the antecedents and outcomes of the phenomenon. Additionally, the focus of this study is B2B firms only. Previous social media literature mainly focussed on the

B2C context with the limited focus is received in the B2B setting (Cao and Weerawardena 2023). Literature has demonstrated that there are significant differences in B2B and B2C firms regarding their operational and contextual characteristics (i.e., Baabdullah et al. 2021; Iankova et al. 2019; Trainor et al. 2014), and it was concluded that there is a need to further investigate the strategic use of social media in the B2B context (Cartwright et al. 2021). Thus, this study further extends the knowledge on the strategic use of social media, in which by extend, social CRM capabilities as to develop these capabilities firms must be using social media to interact with customers (Acker et al. 2011).

Thirdly, in line with the dynamic capability's theory, literature highlights that marketing capabilities (Morgan et al. 2009), and CRM capabilities (Foltean et al. 2019; Srinivasan and Moorman 2005) lead to firm performance. However, in the context of social CRM capabilities, previous literature shows that further studies are needed to understand social CRM and performance relationship (Perez-Vega et al. 2022). Thus, this study further investigates the relationship between social CRM capabilities and firm performance, finding a positive relationship in the context of Turkish B2B firms.

Lastly, literature suggests that it is critical to explore social CRM capabilities in different countries, regions, and industries to gain in-depth knowledge (Pour and Hosseinzadeh 2020). Current literature on social CRM mainly had been conducted in developed markets (i.e., Harrigan et al. 2020; Kim and Wang 2019; Wang and Kim 2017; Trainor et al. 2014; Choudhury and Harrigan 2014; Rapp et al. 2010), ignoring the emerging markets. As discussed, emerging markets are characterised by their uncertain market environment, which the firms operating in these environments have limited resources in comparison to developed countries. Thus, this study focussed on an emerging market, Turkey, to understand how entrepreneurial orientation influences social CRM capabilities, and its impact on firm performance.

#### 7.7 Practical Contributions

This thesis not only contributes to marketing literature, particularly in the area of social CRM, but also offers valuable insights for entrepreneurs operating in the B2B firms in highly uncertain environments. Literature emphasised that academic research should guide

practitioners to add more value to the research (Jussila et al. 2015). The use of social media data for enhancing customer relationships has resulted in social CRM evolving into an increasingly researched topic in academia, with firms seeking to leverage social media data for better customer relationships and improved firm performance are experimenting with innovative applications (Perez-Vega et al. 2022). Firstly, findings reveal that autonomous, risktaker, and aggressive B2B firms in Turkey have stronger social CRM capabilities. For firms that are operating in uncertain environments, which is known for their dynamism and unpredictability, firms with higher autonomy levels can have more flexibility to adapt social CRM strategies quickly in response to market changes and challenges. Firms that can rapidly adapt their social CRM strategies to the specific needs of different customer segments in emerging markets can enhance their social CRM capabilities in which they can gain a competitive advantage over less responsive competitors. Additionally, B2B firms in emerging markets should have higher levels of aggressiveness to develop higher levels of social CRM capabilities. This can lead to increased visibility in social media channels, where competition can be intense, being more visible can help firms to stand out. This study also suggests practitioners that not to be afraid of taking risks when an opportunity arises. A risk-taking attitude in unstable markets can lead the development and effective solutions for B2B clients, which can be facilitated and enhances through social CRM tools.

Furthermore, this study has found a positive relationship between customer-centric management systems and social CRM capabilities. The author suggests B2B firms in emerging markets to adapt a customer-centric approach to enable firms to build long-term relationships with customers by constantly addressing customers need and expectations, which is crucial in the B2B context. Customer-centric management systems involve collecting and analysing data, which is extremely important in the less predictable environments of emerging markets as this allows firms to understand their customers better. In addition, when these systems are integrated with entrepreneurial orientation, it can lead to a deeper understanding of customers' needs and expectation. In this instance, when firms couple customer-centric management systems with entrepreneurial orientation, the impact on social CRM capabilities is magnified, which subsequently enhances firm performance. For B2B firms to achieve stronger levels of social CRM capabilities, entrepreneurs should utilise higher levels of customer-centric management systems with the firms' innovativeness, proactiveness, risk-taking, autonomy and aggressiveness.

Lastly, in this study, positive relationship between social CRM capabilities and firms has been identified. The higher levels of social CRM capabilities that firms have, more enhanced firm performance that they can achieve. Although firms may be able to set up a CRM system or establish a presence on social media, transforming these resource investments into effective capabilities typically requires that the technological investment aligns with and enhances the firms' overall strategies (Trainor et al. 2014). This study recommends B2B practitioners to develop higher levels of social CRM capabilities to achieve enhanced firm performance.

#### 7.8 Limitations and Future Research Areas

This study acknowledges some limitations. The current section discusses these limitations and provides several avenues for future research to extend knowledge in this area.

First, the present study utilised a cross-sectional research design, only examining the variables of interest at one time period. Further research could take a longitudinal approach, examining how increasing social CRM capabilities influences firm performance over time (Childs et al. 2023; Childs et al. 2019). This sample for this study included all the industries within the context of B2B. The research findings, while broadly applicable across various industries, might be less relevant to certain industries where the potential and or customer demand for social media use is not as pronounced (Trainor et al. 2014). Additionally, the context of this study was emerging markets. However, this study only focussed on one country, Turkey. Future research can explore the applicability of these findings to different settings, different emerging markets, and perhaps focussing on different industries. Future research can also look at the possibility of a comparison study between a developed country and emerging market. As the characteristics of these countries are different, entrepreneurs decision-making logics can also differ. Future research can examine causal and effectual logic in the context of social CRM capabilities.

A further limitation, like prior studies using survey research method, this study is based on selfreport data incurring the possibility of common method bias. However, the present study concluded that common method variance is not a concern in this study. Multiple assessments such as Cronbach alphas, composite reliability, discriminant validity and convergent validity has been used to support the accuracy of the data and results. Future studies may utilise objective measures, particularly for firm performance, or any other performance scales to strengthen the research design. Finally, while this study incorporated effectuation theory, it was not empirically measured, but rather theoretically adapted. Future research could quantify levels of uncertainty or other characteristics specific to emerging markets. Additionally, measuring effectuation elements such as perceived uncertainty, affordable loss, and precommitment could provide a more comprehensive understanding.

# 7.9 Chapter Summary

This chapter aimed to provide a comprehensive overview of the PhD thesis by covering four key areas. Firstly, the findings of the research, its theoretical contributions, practical contributions, and limitations and potential directions for future research. These discussions emphasise the significance of this doctoral research in both theory and practical application and suggests ways in which future research might expand upon the concepts explored in this study. It is hoped that the results and recommendations presented here compromise new ideas and perspectives for the reader. Additionally, it is anticipated that this study will encourage further examination into the concept of social CRM capabilities from other vital marketing processes.

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## Appendix 1

## **Overview of Social CRM Literature:**

Study (Authors)	Context	Internal	External	Outcome	Key Findings
		Antecedent	Antecedent	Variable	
Managing Customer Relationships in the Social Media Era: Introducing the Social CRM House (Malthouse et al. 2013)	Conceptual	-	-	-	Social media and other new technologies have given consumers more power and control. To stay relevant, CRM must adapt by creating engagement points that provide value to both the firms and consumers.
CRM to social CRM: the integration of new technologies into customer relationship management (Choudhury and Harrigan 2014)	Europe Marketing practitioners	Customer relationship Orientation  CRM technology use		Customer Relationship Performance	CRO is positively associated with CRM technology use.  Marketing and customer orientation for successful CRM integration is crucial including social media tools. Without understanding customer processes, these technologies may not deliver real value.
Social media technology usage and customer relationship performance: A capabilities-based examination of social CRM (Trainor et al. 2014)	United States B2B / B2C Top-management teams in various industries	Customer-centric management systems (+) Social Media Technology use (+)	-	Customer Relationship Performance	Firms using more social media technology alongside customer-centric systems have stronger social CRM capabilities than those using less. Firms with less CCMS show higher social CRM capabilities than those with more CCMS. The direct impact of customer-centric management systems on social CRM capabilities is significant only in B2B firms.

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Defining and measuring social customer-relationship management (CRM) capabilities (Kim and Wang 2019)	United States	Social CRM capabilities (+)		Firm Performance	Social media use positively moderates social CRM capabilities and firm performance. Firms should view social media investments not as costs, but as resources for developing CRM capabilities that drive organizational transformation and increase firm value.
The role of social media in the engagement and information processes of social CRM (Harrigan et al. 2020)	United Kingdom Senior Marketing Managers	Social CRM technology variety  on social CRM front-office technology capability (+)  social CRM back- office technology capability (+)	-	Customer Relationship Performance	Social CRM differs from traditional CRM in various aspects of both front- office and back- office operations.
The determinants of social CRM entrepreneurship: An institutional perspective (Al-Omoush et al. 2021)	Jordan Banking industry (19) Middle and top management members	Organisational Context (+) Technological Context (+) on Social CRM entrepreneurship	Mimetic (+) Coercive Normative (+) on Social CRM entrepreneurship	Performance of CRM process	The findings show that organisational and technological contexts significantly enhance SCRM entrepreneurship. Limited knowledge about the antecedents of SCRM entrepreneurship and the evaluation of its impact on CRM performance.
From CRM to social CRM: A bibliometric review and research agenda for consumer research (Perez-Vega et al. 2022)	Systematic Literature Review Bibliometric Analysis	-	-	-	The results highlighted three emerging themes in this research area: (1) the impact of CRM on performance, (2) the integration of social media capabilities with CRM, and (3) the strategic utilisation of CRM.

## Appendix 2

## **Cover Letter to Respondents:**

Dear Participant,

I am a PhD researcher at Bournemouth University. I am conducting a study on Social Customer Relationship Management (CRM) in B2B firms. This survey is expected to take no more than 10 minutes to complete, and responses are completely anonymous. The work will be used for academic research purposes only, and you can receive a summary of the findings by emailing the address: icicekli@bournemouth.ac.uk

You can withdraw from participation at any time and without giving a reason, simply by closing the browser page. Please note that once you have completed and submitted your survey responses, we are unable to remove your anonymised responses from the study. Deciding to take part or not will not impact upon the studies at BU. Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will shed light on social CRM capabilities and its effect on B2B firms, specifically in Turkey.

Participation in this study is on the basis of consent: you do not have to complete the survey, and you can change your mind at any point before submitting the survey responses. We will use your data on the basis that it is necessary for the conduct of research, which is an activity in the public interest. We put safeguards in place to ensure that your responses are kept secure and only used as necessary for this research study and associated activities such as a research audit. Once you have submitted your survey response it will not be possible for us to remove it from the study analysis because you will not be identifiable.

The anonymous information collected may be used to support other research projects in the future and access to it in this form will not be restricted. It will not be possible for you to be identified from this data. Anonymised data will be added to BU's Online Research Data Repository (a central location where data is stored) and which will be publicly available.

Contact for further information If you have any questions or would like further information, please contact the supervisory team:

Kaouther Kooli kkooli@bournemouth.ac.uk

Osikhuemhe Okwilagwe ookwilagwe@bournemouth.ac.uk

Ediz Akcay eakcay@bournemouth.ac.uk

In case of complaints Any concerns about the study should be directed to Michael Silk (Deputy Dean for Research & Professional Practice for Business School)

Bournemouth University by email to researchgovernance@bournemouth.ac.uk.