Customer Relationship Management Practices: The Impact on Organizational Performance in SMEs of Food Manufacturing Industry

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Abstract
The successful implementation of customer relationship management (CRM) practices is becoming widely accepted within marketing and sales department in manufacturing industry. Moreover, establishing the customer relationships have always been an important aspect of business. Hence, this study aims to explain the impact of CRM practices to organizational performance through a proposed conceptual model in Malaysian small and medium enterprises (SMEs) food manufacturing industry. A model developed and empirically tested through survey data obtained from 369 organizations. The results indicated that CRM practices have a significant positive effect on organizational performance. Similarly, the results revealed that enhanced key customer focus and relationship marketing leads to better organizational performance. Market turbulence was found to have a negative moderating effect on the relationship between CRM practices and organizational performance. This paper contributes to existing literature by incorporating CRM practices as a construct in the proposed model. The conclusions drawn have implications for CRM practices of key customer focus, relationship marketing and market turbulence in research literature.

Keywords: customer relationship management practices, market turbulence, organizational performance, small and medium enterprises, food manufacturing industry

1. Introduction
In the contemporary business environment, customers are considered to be the central element of all marketing actions, and customer relationship management (CRM) has become a priority for firms marketing strategy (Karakostas et al., 2005). Academics and practitioners proclaimed that a customer relations is necessary for firms to survive and be successful in contemporary business environment (Heinrich, 2005). Business firms, regardless of the size of their organization, as a whole, are spending billions of dollars each year on CRM systems or applications (Ngai, 2005; Zablah et al., 2004). The CRM gained importance as popular business tools of a number of CRM projects implemented successfully in the early 1990s. However, about 70% CRM projects resulted in loss or no bottom line improvement in firm performance (Richard et al., 2007). Additionally many academic and business reports have shown disappointing results on CRM itself (Cheng & Dogan, 2008; Richard et al., 2007; Rigby et al., 2002; Zablah et al., 2004). This could be one of the reasons that CRM is an emerging field of inquiry (Richards & Jones, 2008). To remedy the situation, this study should first determine from where the problems stems. Going through literature, this study implied two problems that are revealed to the CRM practices and organizational performance.

Firstly, instead of customer issue in CRM, food manufacturers in SMEs are not very common in term of CRM systems. Most organizations do not implement CRM systems due to several reasons such as lack of knowledge about CRM and lack of financial resources to implement CRM systems. According to Ata and Toker (2012), Sudhakar and Sudharani (2012) Chuchuen and Chanvarasuth (2011), and Ko et al. (2008) the organizations that have adopted CRM systems as a corporate strategy are expected to grow at a faster pace than those firms who are non-adopters within the same industries. Therefore, food manufacturer need to implement CRM in order to improve business values and gain more competitive advantage on which to base business prospects for longevity (Deros et al., 2006). Secondly, it is related to the concept of CRM. The current trend in competitive market, focusing on customer is becoming a key factor of manufacturers. It is known that it takes up to five times more money to acquire a new customer than to get an existing customer to make a new purchase (Payne & Frow, 2006). Customer retention in CRM is important to food manufacturers based on the organization’s limited resources (Baumeister, 2002). Kalakota and Robinson (2000) argue a firm’s strategy should focus on how to find and retain the most profitable customers instead of just providing superior services. The practices of CRM are necessary to ensure delivering better customer value, retaining customer and having a good relationship with customers.

However, the practices of CRM is a commonly a success in services sectors, whereas a little attention has been paid to research on CRM in manufacturing sectors (Akroush et al., 2011). Akroush, Dahiyat, Gharaibeh, & Abu-Lail, (2011) have proposed that the direction for future research is to replicate modified scale of CRM.
implementation on other industries (e.g. manufacturing sector). Sin et al., (2005) addressed the moderating effect of environmental factors (e.g. market turbulence) on the association between CRM and business performance. Therefore, to fill the gap in the literature on CRM study this takes a broader, strategy focusing on SME food manufacturer in Malaysia. This study intends to look at the practices of CRM elements as to modify and suit with the SMEs context and also to examine the incorporation of the aforementioned factors.

This paper attempts to address the problems of food manufacturing industry as why it needs a CRM solution to be adapted in business model and information technology structure instead of having a better relationship to performance and proposed conceptual model. The elements of CRM practices in this model reflect previous research by Sin et al., (2005) and Keramati et al., (2010). Through this conceptual model, the objectives are:

1. Investigating the relationship between elements of CRM practices and organizational performance.
2. Evaluating the moderating effect of market turbulence between CRM practices and organizational performance.

The remainder of this paper is structured as follows. Section 2 will be present the relevant literature review attempts to examine both the theoretical and empirical research relevant to this study. Section 3 provides a brief conceptual model. In section 4 and 5 presents the research method and discussions of finding respectively. Finally, this study discusses theoretical and managerial implications and derives limitations and suggestions for further research.

2. Customer Relationship Management

2.1 Evolution of Customer Relationship Management

The roots of CRM stem from the relationship marketing theory. Relationship marketing is the process of identifying, developing, maintaining, and terminating relational exchanges with the purpose of exchanging performance (Palmatier, 2008). According to Labus and Stone (2010) CRM is not just a software. In the past, CRM was often seen as a quick fix information technology project proposal implemented by consultancies. Mack et. al., (2005) claim that CRM evolved from total quality management in the 1980s. Schmitt (2003) identifies the origin of the customer orientation movement in 1990s, whereas Newell (2003) recognizes the strategic and technological focus of CRM. According to Chen and Popovich, (2003) The United States software vendors took up relationship marketing to market CRM systems. Labus and Stone refers to the continued usage of relationship marketing terminology, whereas Payne and Frow (2005, p.85) claim that CRM has “its roots in relationship marketing”. Later, Payne addresses the significance of change management in achieving positive CRM outcomes. Therefore, CRM thinking has evolved over the last decade, but there are differences of opinion as to how.

However, this term has been changed according to time as CRM and it’s still a new marketing concept to business strategies in Malaysia especially for small businesses. Referring to Chen & Popovich, (2003) in The United States of America now it has been an advance in technology which uses enterprise software technology compared to CRM, while it is not a new concept in marketing. During the mid-year of 1990s, the first CRM surfaced were information technology vendor and practitioner community (Coltman, 2007). Moreover, Drucker (1954) argue that customers relationship could have been traced since 1950s and customers should be the foundation of an organization and the very reason for its existence.

In the recent years, several factors have contributed to the rapid development and evolution of CRM. The rapid evolution of CRM technologies in organization has been created strong relationships and enhances customer value to improve motivation and the instruments (Day, 2003). In many industries in the world, this intermediation process has become the advent of sophisticated computer and telecommunication technologies that allow producers to directly interact with end customers (Parvatiyar & Sheth, 2001). As a concept of CRM, it covers many activities to increase close interaction with customers. For example in different industries such as airline, banking, insurance, computer software, household appliances and consumables use CRM as a fast changing tool in the nature of marketing and consequently making relationship become popular (Parvatiyar & Sheth, 2001).

2.2 Definition of Customer Relationship Management

The literature regarding relationship marketing and CRM is vast and is discussed extensively elsewhere (e.g. Das et al., 2009; Ngai, 2005; Palmatier, 2008). Influencing elements to form CRM as marketing practices in firm have been examined from different theoretical viewpoint and have received significant attention. Literature for CRM has developed in parallel with the relationship marketing literature (Ata & Toker, 2012; Jayachandran et al., 2005; Plakoyiannaki & Saren, 2006; Shrivastava & Kale, 2003). Sin et al (2005) states that CRM is a comprehensive strategy and process that enables an organization to identify, acquire, retain and nurture profitable customers. Additionally, CRM is a core organizational process that focuses on establishing, maintaining and enhancing long term associations with customers as advocated by relationship marketing (Srivastava et al., 1999). The comprehensive approach of CRM is to maximize the relationship with all
customers. Beside the technological advances, CRM also covers the activities of acquisition management and regain management at the initiation stage, maintenance stage and termination management with the purpose to maximize the value of relationship portfolio (Chen & Popovich, 2003; Dutu & Halmajan, 2011). Hence, it is clear that CRM is not just a technology, but is a new way of doing business, therefore Reynolds (2002) point out that the comprehensive definition of CRM might be the business strategy, process, culture and technology that enables organization to optimize revenue and increase value through understanding and satisfying the individual customer’s needs.

Chen and Popovich (2007) indicate that CRM has evolved from advances in information technology and organizational changes in customer centric process. Thus the attention in managing a successful CRM implementation requires an integrated and balanced approach to technology, process and people (Chen & Popovich, 2003). Coltman (2007) also addresses the concept and argues that CRM must be viewed as more than a tool but part of a deeply embedded strategic disposition that enables business to outperform its rivals in competitive advantage. Furthermore, based on this discussion, this study defines CRM as a core comprehensive firm strategy to provide information through the use of information technology tools to establish long term relationship with customers. It is impossible for organizations to possess all the required sources to stay competitive without having a close relationship with the customers. Therefore it is vital for organizations to deploy CRM practices in order to build strong relationship subsequently improving firm performance.

3. Conceptual Model

There are varying approaches and viewpoints as well as common elements when scholars have attempted to define CRM. CRM is a core firm strategy to provide information to its customer through the use of information technology and to establish long term relationship with them. Given that firm strategy in organization is too focused on customer profitability, the use of technology in CRM will helps organization achieve this goal (Wu & Li, 2011). Through the use of technology, an organization can have customer databases and store data collected from multiple contacts with customers. This technology improves communication and collaboration with customers, thereby delivering superior value (Dutu & Halmajan, 2011). Based on the past related literature (Coltman, 2007; Halawi et al., 2005; Keramati et al., 2010; Parvatiyar & Sheth, 2000; Payne & Frow, 2006; Reinartz et al., 2004; Rigby et al., 2002; Sin et al., 2005; Xu et al., 2007; Zablah et al., 2004) and in-depth interviews with CRM managers, this study hypothesize that CRM is a multi-dimensional construct consisting of three broad behavioral elements: key customer focus, knowledge management and relationship marketing. This three elements have been developed based on the relationship marketing theory and also based on previous studies (Das et al., 2009; Sin et al., 2005; Wu & Lu, 2012). This study shall be tested in the food manufacturing industry. The model that forms the theoretical framework of the study is presented in Figure 1.

Figure 1 The Conceptual Model

3.1 Hypotheses Development

3.1.1 CRM Practices and Organizational Performance
The outcome variable of interest in this study is organizational performance. Organizational performance refers
to how well an organization achieves its market orientation and financial goals (Li et al., 2006). Prior studies have used specific measures of organizational performance by measuring both marketing and financial performance (e.g., Sin et al., 2005) through several indicators criteria (Chong & Rundus, 2004; Li et al., 2006; Sin et al., 2005) and taking into consideration factors that are associated with CRM activities (Ryals, 2005). In this study organizational performance will be measured through the use of marketing performance and financial performance.

In marketing performance, the use of CRM practices by firms will increase customer loyalty and customer retention as consequences improving customer satisfaction (Jarad et al., 2011). Other studies aim to capture the multi-faceted nature of organizational performance of customer loyalty, customer satisfaction (e.g., Mithas et al., 2005) and customer retention (Aspara, 2011). A recent study by Chuchuen and Chanvarasuth (2011) found that the solution of CRM is brought into many organizations and is gaining insights into the behavior of customers, helping business to understand the value of customers and make changes to the way organizations approach their relationships with customers. However, firms are more influenced by technological and organizational factors than environmental factors, where organizations are willing to adopt CRM. Thus, firms have the ability to perceive a greater relative advantage, a greater ability to experiment with CRM before practice, a greater top management support, and a greater organizational readiness. A larger size of firms is more likely to become adopters of CRM (Ramdani & Kawalek, 2008).

In financial performance aspect, a performance measurement using financial metrics will be misleading (Keramati et al., 2010). The reason is that, in today’s competitive environment, traditional financial accounting measures, such as return on investment, can give misleading signals concerning continuous improvement and innovation (Kaplan & Norton, 1992). Specifically, for the cross-functional nature of CRM, the traditional performance measurement systems may be inappropriate (Payne & Frow, 2005). All subjective measures of performance have been employed depending on the availability of information and the willingness of respondents to provide confidential organizations data with respect to its major competitors (Ata & Toker, 2012).

Following the discussion above, this study hypothesizes that:

**H1.** There exists a positive relationship between CRM practices and organizational performance.

### 3.1.2 Key Customer Focus and Organizational Performance

Drienhart and Gregoire (1993) have defined key customer focus as an employee’s personal focus to provide excellent service to customers. An important condition that enables the organization to be truly customer focus is the way in which it delivers value to its customers, as Payne and Frow (2006) propose. Marketing concept promotes putting the interest of customers at first and previous scholars consider a customer focus to be the most fundamental aspect of customer relationship. It is because the marketing concept encourages a business to be forward looking, a customer focused business is likely to be more interested in long-term business success as opposed to short-term profits (Heiens, 2000). Increasing competition and decreasing customer loyalty have led to the emergence of concepts which focus on the nurturing of relationships to customers (Gebert et al., 2002). Stone (2000) acknowledges that CRM allows firms to develop a robust targeting and enquiry management processes and this help boost new businesses significantly. Peppers and Rogers (1993) also find that the cost of developing new customers is six times more than retaining old customers. One of the best and obvious ways of achieving this is through a scientifically sound marketing and customer retention strategy. The customer focus involves the establishment of links between customer needs (Donaldson & O’Toole, 2002; Sousa, 2003), customer satisfaction (Gebert et al., 2002; Sousa, 2003) and customer retention and loyalty. This will encourage customers to stay longer, buy more often, thus increasing firm’s long term value to the business. Drienhart and Gregoire (1993) suggest that as employees’ job satisfaction, job involvement, and job security improve, customer focus also improves. However, customer relationships focus in managing the relationship between organization and its current prospective customer base as a key to success (Gebert et al., 2002). Consequently, it is hypothesized that:

**H2.** Key customer focus with regard to CRM practices is positively related to organizational performance.

### 3.1.3 Knowledge Management and Organizational Performance

Knowledge is viewed as one of the important and high valued organization assets for CRM (Wang et al., 2010). Review by Plessis and Boon (2004) emphasizes that knowledge management is a prerequisite for e-business and its increasing customer centric focus. It is worth underlining that the concepts of knowledge and information tend to be used interchangeably throughout the literature and praxis (Kakabadse et al., 2001). For example, information management captured on corporate databases is often considered an example of knowledge management. Although information and data management are the important pillars of knowledge management encompasses broader issues, the creation processes and behaviors allow people to transform information within the organization, create and share knowledge. Thus, knowledge management must encompass people, process, technology and culture (Massa & Testa, 2009). A good knowledge of customer needs also increases customer loyalty and repeat business which are very important priorities under the chosen competitive strategy (Sousa, 2003). Knowledge management has a significant impact on customer loyalty and satisfaction (Wang et al., 2010).
From the perspective of a process owner, both CRM and knowledge management approaches promise positive impacts on the cost structure and revenue streams for a firm in return for allocating resources from the core business into supportive functions (Gebert et al., 2002). Therefore, it is hypothesized that:

H3. Knowledge management with regard to CRM practices is positively related to organizational performance.

3.1.4 Relationship Marketing and Organizational Performance
Relationship marketing was introduced in the service marketing by Leonard Berry in 1983. Hellas (2005) point out the paradigm of conventional mix approach is shifted to relationship marketing. Relationship marketing involves building long term interactive relationships, especially with customers, which is the most important benefit for the organizations which have adopted this concept (Webster, 1992). This is underlined by Gronroos (1991) who states that the purpose of relationship marketing is to establish, maintain and enhance relationships with customers and other partners. In addition, a good application of relationship marketing requires the presence of a good internal marketing (Álvarez et al., 2011). The objective of relationship marketing is to increase the customer's commitment to the organization through the process of offering better value on a continuous basis at a reduced cost. This can be achieved partly within the organization and partly through partnerships with suppliers and even competitors. The measure of success is the growth of the share of the customer’s business and its profitability (Parvatiyar & Sheth, 2002). Wu and Lu (2012) find that relationship marketing has a positive influence on the four aspects of organizational performance in services namely financial, customer, internal process, and learning and growth. The concepts proposed by Evans and Laskin (1994) and Christy et al. (1996) show favorable results and strongly verify that relationship marketing effect has a positive influence on organizational performance. Accordingly, the following is predicted:

H4. Relationship marketing with regard to CRM practices is positively related to organizational performance.

3.1.5 Moderating Role of Market Turbulence
Market turbulence reflects the degree of change in customer preferences for products in an industry (Jaworski & Kohli, 1993) and it is a key source of environmental turbulence. Environmental turbulence refers to the rates of change in the market and/or technology within industry (Jaworski & Kohli, 1993; Kim & Atuahene-Gima, 2010). In this respect, the market turbulence concept tries to simultaneously evaluate the change that the firms face from a set of clients and competitors (market dynamism), and the difficulty to prepare the organization to cope with the new competitive scenarios (market uncertainty) (Santos-Vijande & Álvarez-González, 2007). When market turbulence is low, organizations can concentrate on competitive advantage by focusing on customer satisfaction (Subramanian et al., 2009). Nevertheless, as market turbulence increase, firms must move away from existing customer needs and seek to satisfy latent needs to maintain a competitive advantage (Slater & Narver, 1998). Environmental variables can moderate the effect of management strategies (Atuahene-Gima, 1996). Market turbulence is also deemed to moderate the relationships between a firm’s culture and performance in the marketing domain (Slater & Narver, 1994; Slater & Narver, 1995).

Market turbulence in business environment have been shown to interact significantly with key variables in marketing studies investigating customer relationship and business performance (Pelham, 2000; Pulendran et al., 2003), although not in all cases (Kohli et al., 1993; Subramanian & Gopalakrishna, 2001). For example, a firm whose customers have rapidly changing preferences may require a higher level of customer relationship (i.e., the need to be more persistent in long term businesses) in order to succeed. This leads to the following hypotheses:

H5. Market turbulence negatively moderates the relationship between CRM practices and organizational performance.

3.2 Scales Measurement
The origins of the items that measure the CRM practices’ constructs in the research model are threefold. Some of these items are adopted from previous researches (see e.g. Das et al., 2009; Jaworski & Kohli, 1993; Santos-Vijande & Álvarez-González, 2007; Sin et al., 2005). Other items have originated from research by Wang and Feng (2012), Richard et al., (2007), and Sin et al., (2005). It has been adapted to suit with manufacturing industry in this study. The previous researcher has suggested, that study in CRM should also be tested in manufacturing industry as proposed by Akroush (2011), and a pilot study was done to check the validity and reliability of the instruments. This study aims to explore and develop a model of CRM practices to enhance increasing organizational performance in food manufacturing industry. The constructs of customer focus and knowledge management have adopted more than one authors (Das et al., 2009; Sin et al., 2005). Therefore, a group of items was generated for the operational CRM elements; key customer focus, knowledge management, relationship marketing, market turbulence and organizational performance. A list of scales used in the measurement instrument, the origins of author and the reliabilities are presented in the Appendix (Table A1).

4. Research Method
This study is a cross-sectional study that focuses on the Malaysian SME food manufacturers. A questionnaire
was utilized as the research instrument for this study. The questionnaire was constructed following an extensive literature review. Essentially, the objective of conducting the pilot study was to assess questions in terms of validity, scales, and measures. In the pilot study, 63 respondents consist of academic experts in CRM and middle to senior business executives in manufacturers were chosen and took part in a face to face interview to comment on the questionnaire constructed. Each participant was asked to indicate on a seven-point scale (1=“strongly disagree,” 7=“strongly agree”) the extent to which he/she agreed with the items with respect to the CRM practices engaged by his/her affiliated organizations. After necessary revisions were made based on the feedbacks received, the final questionnaire was distributed in the large scale survey.

Respondents for this study were gathered based on the Malaysian External Trade Development Corporation online directory databases for Food Manufacturing Industry. The questionnaires were distributed to 2,315 active Malaysian food SME manufacturers. The target respondents were CEOs or other top-level management who have the information about the organization’s marketing strategy (Kumar et al., 1993), who have the greatest insight into these organization practices (Lee-Kelley et al., 2003) and who have the most influence on organization outcomes (Stubbart, 1989).

Furthermore, past studies have demonstrated that knowledgeable senior managers can provide information as reliable and as valid as that obtained from multiple firm respondents (e.g. Atuahene-Gima & Murray, 2004). Top level manager were contacted through online survey and responses were obtained 453 organizations. This represents a 15.9% response rate, which compares well to previous studies (e.g., Akroush et al., 2011; Sin et al., 2005). The sample size of 453 was adequate for models with four constructs as recommended by Hair et al. (2006). After missing data analysis was conducted, only 369 data are usable.

Table 1 indicates the result of descriptive statistics for demographic profile of food manufacturer organizations. The manufacturer of processed food products revealed 52.5%, manufacturer of agriculture based products were obtain 31.3% and the remaining 16.2% manufacturer of beverage products. More than 42.0% of the manufacturer organizations were medium sized organizations with a sales revenue of between RM1 million to RM15 million and less than 50 employees. Of all the responses, 71.3% came from organizations with more than 6 years operations, 17.9% has business experience of 3 to 6 years operations and the remaining 10.8% have been operating 3 years or less. Additionally, managing director/partner in managerial level is effective respondents of 29.3%, compare to senior management of 28.2%, middle management of 24.4% and chief executive officer of 18.2%.

4.1 Reliability Analysis
Reliability analysis revealed that all constructs tested in this study have standardized Cronbach’s alpha scores of 0.70 and higher (see Appendix (Table AI)). Consequently, there is evidence of internal consistency for the measurement instrument. The Cronbach’s alpha score presented for the each CRM practices construct represents the reliability of the overall scale. Previous studies have used similar measures of performance (e.g. Richard et al., 2007), key customer focus and knowledge management (e.g. Das et al., 2009; Sin et al., 2005), relationship marketing (e.g. Wu & Lu, 2012) and market turbulence (e.g. Jaworski & Kohli, 1993) with sufficient validity. In order to confirm that the all CRM practices elements can be discriminated, exploratory factor analysis (see Appendix (Table AI)) was conducted. Total variance explained was found to be 0.97 and the correlation between the three components was found to be 0.73 and 0.71, which indicate evidence of discriminant validity.

4.2 Descriptive Statistics and Correlation Coefficients Analysis
Table 2 presented the means, standard deviations and correlation coefficients of the variables. Hair et al. (2006) states that a correlation of 0.90 and higher among variables is a sign of substantial collinearity. The correlation coefficients of item to total are all greater than 0.50, which means that all of the measurement factors and dimensions have convergent validity (Hair et al., 2006)

4.3 Multiple Regression Analysis and Hierarchical Regression Analysis
A series of regression analyses were conducted to test the hypothesized causal relationships tested in this study. Table 3 indicates a multiple regression analysis for CRM practices elements and organizational performance. The regression equation explained 22% of variation in the implementation level of CRM practices (R² = 0.22, F = 26.46, p < 0.05). A relationship between CRM practices and organizational performance is not significant (β = 0.02, t = 0.40, sig. 0.69), and not supporting H1. Of the two dimensions of CRM practices elements, key customer focus (β = 0.26, t = 3.50, sig. 0.00) and relationship marketing (β = 0.18, t = 2.46, sig. 0.02) are both significant at p < 0.05. Hence from the results obtain indicates that the greater the extent CRM practices of customer focus and relationship marketing, the higher the organization performance will be. Therefore, both H2 and H4 are significant respectively. However, H3 is rejected as knowledge management was not significant to predict organizational performance, with p = 0.34.
Table 1 Descriptive Statistics

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturer industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturer of processed food products</td>
<td>194</td>
<td>52.5</td>
</tr>
<tr>
<td>Manufacturer of agriculture based products</td>
<td>115</td>
<td>31.3</td>
</tr>
<tr>
<td>Manufacturer of beverage products</td>
<td>60</td>
<td>16.2</td>
</tr>
<tr>
<td><strong>Annual Sales Revenue</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than RM1 million</td>
<td>102</td>
<td>27.6</td>
</tr>
<tr>
<td>RM1 million to RM15 million</td>
<td>155</td>
<td>42.0</td>
</tr>
<tr>
<td>RM15 million to RM25 million</td>
<td>48</td>
<td>13.0</td>
</tr>
<tr>
<td>More than RM25 million</td>
<td>64</td>
<td>17.3</td>
</tr>
<tr>
<td><strong>Year of operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 3 years</td>
<td>40</td>
<td>10.8</td>
</tr>
<tr>
<td>Between 3 to 6 years</td>
<td>66</td>
<td>17.9</td>
</tr>
<tr>
<td>More than 6 years</td>
<td>263</td>
<td>71.3</td>
</tr>
<tr>
<td><strong>Number of employees</strong></td>
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<td></td>
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<tr>
<td>Less than 50</td>
<td>214</td>
<td>58.0</td>
</tr>
<tr>
<td>Between 51 to 100</td>
<td>61</td>
<td>16.5</td>
</tr>
<tr>
<td>Between 101 to 149</td>
<td>47</td>
<td>12.7</td>
</tr>
<tr>
<td>More than 150</td>
<td>47</td>
<td>12.7</td>
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<tr>
<td><strong>Managerial Level</strong></td>
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<tr>
<td>Managing director/ partner</td>
<td>108</td>
<td>29.3</td>
</tr>
<tr>
<td>Chief executive officer</td>
<td>67</td>
<td>18.2</td>
</tr>
<tr>
<td>Senior management</td>
<td>104</td>
<td>28.2</td>
</tr>
<tr>
<td>Middle management</td>
<td>90</td>
<td>24.4</td>
</tr>
</tbody>
</table>

**Total of respondents 369 100.0**

Table 2 Means, Standard Deviations and Correlation Coefficients

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Customer Centric</td>
<td>6.00</td>
<td>0.71</td>
<td>1.03</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(2) Interactive Communication</td>
<td>4.00</td>
<td>0.39</td>
<td>1.10</td>
<td>0.65**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Knowledge Learning and Responsiveness</td>
<td>6.00</td>
<td>0.79</td>
<td>0.97</td>
<td>0.72**</td>
<td>0.50**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(4) Knowledge Sharing</td>
<td>2.00</td>
<td>0.81</td>
<td>1.10</td>
<td>0.67**</td>
<td>0.58**</td>
<td>0.75**</td>
<td>1</td>
</tr>
<tr>
<td>(5) Relationship Marketing</td>
<td>7.00</td>
<td>0.80</td>
<td>1.00</td>
<td>0.74**</td>
<td>0.50**</td>
<td>0.73**</td>
<td>0.58**</td>
</tr>
</tbody>
</table>

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

Table 3 Results of Multiple Regressions for CRM Practices and Organizational Performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direct effect on Organizational performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM practices</td>
<td>0.02</td>
</tr>
<tr>
<td>Key customer focus</td>
<td>0.26 ****</td>
</tr>
<tr>
<td>Knowledge management</td>
<td>0.07</td>
</tr>
<tr>
<td>Relationship marketing</td>
<td>0.18 ***</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.23</td>
</tr>
<tr>
<td>Adjusted (R^2)</td>
<td>0.22</td>
</tr>
<tr>
<td>F-change (sig)</td>
<td>26.46 ***</td>
</tr>
</tbody>
</table>

*p<0.10, **p<0.05, ***p<0.01, ****p<0.001 (n=369)

Finally, to test the moderating effect of market turbulence in the relationship between CRM practices and organizational performance, this study used hierarchical multiple regression analysis suggested by Hayes’s (2013) step. Table 4 provides the results of the hierarchical multiple regression analysis to access the effects of market turbulence. To test moderation analysis, this study particular be looking at the interaction effect between CRM practices and market turbulence and whether or not such an effect is significant in predicting organizational performance. The predictor variables were entered into the regression equation in the first step, this study accounted for 41% of the total variance in organizational performance. There was a significant decrease in explained variance in the organizational performance (R square change = 37.0; \(p < 0.00\)) when the interaction variables were entered into the equation in the final step. In terms of the moderating influence of market turbulence between CRM practices and organizational performance, the effect of CRM practices on organizational performance is positively affect (\(\beta = 0.36, \text{sig.} 0.40\)). Thus the findings is not supported the moderating effect of market turbulence in the relationship between CRM practices and organizational performance.
performance. Therefore H5 is rejected.

Table 4 Results of Hierarchical Regression Analysis – Testing the Interaction Effect of Market Turbulence against CRM Practices on Organizational Performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direct effect on organizational performance</th>
<th>Direct &amp; interaction effect on organizational performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM practices</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>Market turbulence</td>
<td>0.49 ****</td>
<td>0.67 ****</td>
</tr>
<tr>
<td>CRM practices x Market turbulence</td>
<td></td>
<td>0.36</td>
</tr>
<tr>
<td>R²</td>
<td>0.42</td>
<td>0.61</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.41</td>
<td>0.37</td>
</tr>
<tr>
<td>F-change (sig)</td>
<td>55.88 ****</td>
<td>27.55 ****</td>
</tr>
</tbody>
</table>

*p<0.10, **p<0.05, ***p<0.01, ****p<0.001 (n=369)

5. Discussions of Finding

This article address fundamental theoretical and pragmatic issues related to CRM practices in business markets. It contributes to the relevant literature first by re-conceptualizing previously established CRM constructs, namely key customer focus, knowledge management and relationship marketing and then by enlarging the scope of operational CRM to encompass business processes. The CRM practices construct was empirically tested and found have increasing in organizational performance. Thus this study shares with the CRM literature the long-held belief that CRM is a critical success factor for organizational performance (Akroush et al., 2011; Ata & Toker, 2012; Das et al., 2009; Sin et al., 2005)

The analysis results shows that of the three dimensions of CRM practices – key customer focus, knowledge management and relationship marketing – the key customer focus and relationship marketing are the important element in increasing organizational performance in firms. In the course of emphasizing the importance of skillful arrangement and organization of all behavioral components of CRM in order for superior CRM performance to be realized, Sin et al. (2005) highlight the paramount importance of maintaining a genuine customer focus to galvanize all parts of the firm to make them work in concert in an effort designed to make the firm become indispensable to customers. Moreover, this study’s findings have support the Sin et al. (2005) findings that customer focus as a main strategies in increasing the relationship with Malaysian food manufacturer performance and contrast with Akroush et al (2011) findings. It’s also support by Sousa (2003) that state customer focus practices are contingent on a manufacturing strategy and identifies mechanisms by which this takes place. This finding also differs from that of Yim et al. (2004) whose study pointed out that focusing on key customers significantly affects customer satisfaction, and indirectly affects customer retention, which are two performance metrics associated with the benefits of implementing CRM on the organization. Therefore, for firms aiming to adopt CRM applications to improve organizational performance in terms of financial and marketing, it is advisable to concentrate on understanding and needs to focus on selected customers through customer-centric management and has a strong long term relationship with focus customer by adopting a suitable CRM systems and acquiring a CRM outlook on customer-facing processes. The key customer focus is perhaps the ones that managers should initially focus in CRM implementation if rapid positive results are targeted.

It was also found that relationship marketing is the strongest predictors of variations in food manufacturer’s performance. Earlier studies on relationship determinants (e.g. Lancastre & Lages, 2006) suggest that relationship marketing activities offer added-value to the customer – even when selling routine products – and are worth investing in as organizations promote customer loyalty. Moreover, the non-critical products’ context represents an excellent opportunity to develop cross-selling and up-grading business activities with the buyers, outcomes that normally follow the implementation of retention and loyalty strategies. Development of tools to assess the performance of a long-term relationship process between two firms becomes crucial for managers to better understand and efficiently handle customer relationships. In short, a good application of relationship marketing requires the presence of a good internal marketing (Álvarez et al., 2011).

The next is knowledge management element, which comprises the constructs of knowledge learning and responsiveness and knowledge sharing, was not important element in increasing organizational performance especially in food manufacturer organizations. Reasons for this finding may be organizations less or limited to apply knowledge management. Previous study found by Plesis and Boon (2004) that very little true knowledge management with practical experience in manufacturer organization. This is due to the fact that very few organizations have highly sophisticated knowledge management systems. Malaysian food manufacturer organizations will have to encourage the training of such individuals and also arrange possible international exposure to international knowledge management programmes. Management should also promote the importance and status of knowledge workers in organizations.

Finally, the increasing market turbulence will affect the relationship between CRM practices and organizational...
6. Theoretical and Managerial Implications

The present study makes both theoretical and managerial contributions, and suggests several applications for the research. Theoretical contribution is to offer a significant advance to the current literature of CRM practices by affording an integrative framework to organizations. This study provides a clear conceptualization of CRM practices construct and develop a conceptual model with three elements namely key customer focus, knowledge management and relationship marketing. Though some of the ideas expressed in this conceptual model may be familiar to marketers, its value is in integrating these various notions to provide a more comprehensive and holistic picture of CRM practices.

Several important managerial implications follow from this study. First and foremost, it is clear that CRM practices can be leveraged to provide important customer information which can be used to improve organizational performance. Since, the traditional way of marketing in increasing retention of customer incurred high cost, the best practicing of CRM provides firm with a promising way to attack this critical problem. The practicing of CRM in firm will adopt, build and test integrative strategies in a food manufacturer setting. Second, periodic measurement of a firm’s CRM could help managers track changes over time. Other than the applicability of the model in the monitoring process, the three components in the CRM model may serve training needs by assisting human resource managers to develop appropriate training programs that can help improve the staff’s understanding of the activities involved in implementing CRM. Finally, top management may use this framework to develop relevant and effective marketing strategies and tactics. Functional managers can also use the framework to set clear policies that develop and consider CRM as a necessary and essential business process rather than a burden on the staff. Changing the corporate culture and reward system accordingly reinforces behavior that creates strong CRM, and should also be considered.

6. Limitations and Direction for Future Research

The findings of this study are subject to certain limitations should be considered during the interpretation of the results. However, as with all research, there are some limitations inherent in this study, which restrict its interpretation and generalizability, and which open the door for future studies. First, the cross-sectional nature of this study provides only a snapshot in time which makes it difficult to fully understand the order of effects and this study are, therefore, left to infer causality. Future research examining these constructs with longitudinal data can provide a richer understanding of the relationships between CRM practices and organizational performance. Second, limitation is concerns the fact the survey responses all came from top managers. This limitation raises concerns about the influence of method bias in these results. As Evans (1994) notes, however, interaction effects are not subject to common method bias since informants are unable to determine the complex relationships involved. Future work to test and refine the proposed framework is inevitable to evaluating and validating its practicality.

Third, the any successful framework of CRM practices, organizations need to understand and refine organization own vision of how knowledge should be structured, communicated, and socialized within the organization to influence results (Al-Khoury, 2012). The determinants (i.e. antecedents) of CRM also require both theoretical and empirical investigations; after all, managers need to know how organizations can be instrumental in shaping the CRM of their firms. On the whole, continued refinement of the CRM practices scale and supported in this study is, undoubtedly, possible and even desired, based on future research and changes in business environments.

Acknowledgements

The authors would like to thank the anonymous reviewers who have provided valuable input into clarifying the ideas presented in this paper. The first author is funded by a scholarship from Ministry of Higher Education, Malaysia.

References


**Appendix**

<table>
<thead>
<tr>
<th>Dimension/construct</th>
<th>Cronbach's alpha</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key customer focus</strong> (adopted from Das et al., 2009, Sin et al., 2005 and Chong &amp; Rundus, 2004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Customer centric</strong></td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>Our organization strives to constantly surprise and delight our key customers</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>All people in our organization treat key customers with great care.</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>Our organization provides customized products and services to our key customers.</td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td>We frequently are in close contact with our customers.</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>Our organization makes an effort to find out what our key customer needs.</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>Our customers give us feedback on quality and delivery performance.</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td><strong>Interactive communication</strong></td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>Our organizations do co-branding programs to provide increased value to our customers.</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Our customers seldom visit our plant.</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>When our organization finds that customers would like to modify product and services, the departments involved make coordinated efforts to do so.</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Our organizations use the concept of “relationship in pricing” in pricing our different product and services.</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge management</strong> (adopted from Das et al., 2009, Sin et al., 2005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge learning and responsiveness</strong></td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>Our organization fully understands the needs of our key customers via knowledge leaning.</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>Our organization provides channels to enable ongoing, two-way communication with our key customers.</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>Our organization takes customer feedback seriously.</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>Customers can expect prompt service from employees of our organization.</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Our employees are willing to help customers in a responsive manner.</td>
<td>0.91</td>
<td></td>
</tr>
<tr>
<td>Our organization wills replies customer feedback promptly.</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge sharing</strong></td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>Our organization use information from customers to design or improve our products or services.</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Our organization has effective customer recovery strategies including guarantees for service failures.</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td><strong>Relationship marketing</strong> (adapted from Wu &amp; Lu, 2012)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization is able to handle customer problems immediately.</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Our organization provides exclusive services to customers.</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>Our organization has developed customer relationships between our regular customers.</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>Our organization understands the outcome of customer relationships.</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>Our organization has established mutual trust with customers.</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td>Our organization has better brand image compared to competitors.</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>Customer can react to and accept requirement of our company.</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td><strong>Market turbulence</strong> (adapted from Keramati et al., 2010)</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>Our customer’s preferences are constantly changing.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Our set of client changes on a regular basis.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Our new competitors enter the market place on a regular basis.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Our organization is secure about how to presently deal with our customer to keep them in the future.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Our firm experiments a high rate of change of its competitors.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Our organization can accurately predict the future characteristics of our competitive environment.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Our organization can anticipate how to satisfy our customer’s future preferences.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Our organization can predict the evolution of the environmental forces.</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
## Organizational performance

### Financial performance (adopted from Li et al., 2006 and Neill & Rose, 2006) 0.83
- Our organization has been outstanding in achieving market share.
- Our organization has been outstanding in sales growth.
- Our organization has been outstanding in profitability.
- Our organization has been reducing a cost of transaction with customers.
- Our organization has been success at generating revenues from new products.

### Customer loyalty (adapted from Richard et al., 2007) 0.81
- I say positive things about this customer to others
- I encourage others to purchase from this customer
- I would recommend this customer to someone who seeks my advice
- We expect to do more business with this customer in the next few years.

### Customer satisfaction (adapted from Richard et al., 2007) 0.89
- The relationship between my company and this customer reflects a happy situation
- The relationship between the two companies is very positive
- My company is very satisfied with this customer

### Customer retention (adapted from Richard et al., 2007) 0.82
- I consider this manufacturer our first choice to buy from.
- We continue to purchase from this manufacturer more so than from other manufacturer
- We are looking for alternative manufacturer

### Perceived performance (adapted from Richard et al., 2007) 0.91
- Our relationship with them has been productive
- The time and effort invested in the relationship with them has been worthwhile
- The relationship with them has been satisfactory
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