MOVING TOWARD E-BUSINESS: CUSTOMER RELATIONSHIP MANAGEMENT ALIGNMENT IN MALAYSIAN SMALL BUSINESS

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—Abstract —

The study proposes a research model on customer relationship management (CRM) alignment and investigates the impact of alignment on performance. A total of 300 survey questionnaires were distributed to business owners of small and medium enterprises in Malaysia; 226 were used for analysis. From researchers’ perspective, the research has contributed to new theoretical knowledge on CRM alignment as evident through the development of a new
research instrument and research model that explains organizational performance. From practical perspective, the research has clarified the components of CRM alignment and impact of CRM alignment. Implications of research are discussed herein.

**Key Words:** Business strategy, customer relationship management, strategic alignment, information systems strategy, Balanced Scorecard  
**JEL Classification:** M15

### 1. INTRODUCTION

The proliferation of Customer Relationship Management (CRM) applications is well recognized in many organizations. As organizations integrate CRM applications into their sales and marketing strategy, its impact on company performance continues to be debatable. Anecdotal evidence and analyst reports show that CRM implementation is far from organization’s expectation (Rigby et al., 2002; Foss et al., 2008). Conceptualizations about CRM in the literature give varying perspectives as organizations view CRM implementation and success differently. Some organizations consider CRM as a process (Day and Van den Bulte, 2002), strategy (Parvatiyar and Sheth, 2001), capability (Peppers, Rogers and Dorf, 1999) or technological tool (Shoemaker, 2001). Other organizations simply view CRM as a help desk or call center. The lack of appropriate definition of CRM has been said to affect the way an entire organization accepts and practices CRM (Swift, 2000; Payne and Frow, 2005). Hence, given the importance of CRM, the study aims at developing a research model on CRM alignment and investigating the impact of CRM alignment on performance.

### 2. LITERATURE REVIEW AND RESEARCH MODEL

In developing a research model on CRM alignment, the research builds on theories from prior literature on strategic alignment between business and information systems, CRM and Balanced Scorecard.

#### 2.1. Strategic alignment
For more than twenty years, the alignment between business and information systems (IS) has consistently appeared as one of the main concerns among practitioners and academics (Chan and Reich, 2007a; Chan and Reich, 2007b; Luftman et al., 2008). The latest annual survey on IT industry in 2010 shows that business and information technology (IT) alignment (BIA) is still among the top five of top management concerns, after dominating for four consecutive years 2003, 2004, 2005, 2006 (Society of Information Management, 2010). The term ‘alignment’ is sometimes used differently in the BIA literature; some researchers used ‘fit’ (Venkatraman, 1989; Chan, 1992; Henderson and Venkatraman, 1993), ‘harmony’ (Luftman, 1993), ‘bridge’ (Ciborra, 1997), ‘fusion’ (Smaczny, 2001), ‘integration’ (Weill and Broadbent, 1988), and ‘linkage’ (Henderson and Venkatraman, 1993). There is little agreement in the literature on how to define alignment, because alignment may be viewed as business strategy that is aligned with IT strategy or the other way around. Further, debates in the literature on whether alignment is an ‘end state’ (referring to the level that can be achieved) or a ‘process’ (to get to a certain state) are still going on (Silvius, 2007). Chan and Reich (2007a) argued that alignment will never reach an ‘end state’ because strategy implemented in organizations is frequently driven by business environment and technology changes; thus strategic alignment is a process of change overtime and continuous adaptation (Henderson and Venkrataman, 1993; Maes et al., 2000).

2.2. Customer relationship management

Boulding et al. (2005) argued that the benefits of CRM applications are perceived differently across industries. Richards and Jones (2008) identified and summarized the core benefits of CRM from 28 relevant articles. Based on their review, some common agreements can be found in the literature on how CRM affects organizational performance:
• increases revenue through efficient and effective sales force
• improves pricing
• increases customer satisfaction and loyalty through better customer service
• enhances product development and differentiation through customization/personalization
• enhances ability to create long-term relationships and customer segmentations
• improves customer acquisition and retention
• motivates employees to foster customer relationship
• reduces administrative and operational cost
• enhances decision-making process
• improves knowledge sharing among the selling companies

2.3 Balanced Scorecard

Past studies proposed the Balanced Scorecard (BSC) approach to assess CRM success. Kim et al. (2003) suggested that for CRM activities to be effective, an iterative process of assessment and evaluation is needed. They developed customer-centric BSC to assess CRM effectiveness. The instrument contains customer value, customer satisfaction, customer interaction and customer knowledge. Through their case study using BSC, they suggested that organizations need to improve their interaction channel with customers and customize the products by enhancing customer loyalty. Moreover, organizations also need to enhance their services (attractive Website content) and increase access speed (bandwidth) for convenient purchase process. Another study using BSC is reported by Kim and Kim (2009). They developed CRM scorecard to measure CRM capabilities and readiness. The results indicated that organizations need to focus on three factors; customer (loyalty, satisfaction, value), infrastructure (IT, human capital, organization alignment, culture), and process (customer acquisition, retention, expansion) in order to achieve performance through CRM implementation.

2.4 Research model and hypotheses

Grounded on the above theories, we propose that CRM alignment comprises (i) strategic alignment between business and information systems and (ii) alignment between CRM process and information systems. Impacts of CRM alignment consists of CRM performance and organizational performance. Consequently, it is hypothesized that:

H1: CRM performance is positively related to organizational performance
H2a: CRM process-information systems (IS) alignment is positively related to CRM performance
H2b: CRM process-IS alignment is positively related to organizational performance
H3a: Business-IS strategic alignment is positively related to CRM performance
H3b: Business-IS strategic alignment is positively related to organizational performance
H4: Business-IS strategic alignment is positively related to CRM process-IS alignment

Figure 1 shows the CRM alignment research model.

3. RESEARCH METHODOLOGY

3.1 Context of study and research approach

The research uses Malaysian small and medium enterprises (SME) as the context. In Malaysia, SME is generally an establishment that has fewer than 50 employees with turnover of below RM25 million. In 2009, SME in Malaysia account for about 99% of total business establishments (552,849) and contribute to 31.2% of the nation’s Gross Domestic Product (GDP). SME have provided 56% to total employment and 19% exports of the country (SME annual report). Hence, SME were chosen due to its importance in contributing to national economic growth, positioning competitive advantage and creating jobs. A total of 300 survey questionnaires were distributed to Malaysian SME.
3.2 Instrument

To measure the constructs and to ensure validity, the research adapted survey items from prior literature. In measuring the constructs of the research, respondents were asked to evaluate 22 items using five point Likert scale; 1 representing “strongly disagree” and 5 representing “strongly agree”. The respondents were asked to complete a section on organizational demographics.

4. FINDINGS

A total of 226 survey questionnaires were received. Table 1 shows the breakdown of industry that the responding SME represents.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>8</td>
<td>3.5</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>7</td>
<td>3.1</td>
</tr>
<tr>
<td>Direct selling</td>
<td>39</td>
<td>17.3</td>
</tr>
<tr>
<td>Travel and hospitality</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>Professional services (legal, accounting etc.)</td>
<td>71</td>
<td>31.4</td>
</tr>
<tr>
<td>Information and communication technology</td>
<td>12</td>
<td>5.3</td>
</tr>
<tr>
<td>Others</td>
<td>80</td>
<td>35.4</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>226</td>
<td>100</td>
</tr>
</tbody>
</table>

In terms of the number of employees, the minimum reported was one, maximum was 150 while average was 15. In terms of duration in business, minimum was fewer than one year, maximum was 33 years and average was four years. Cronbach’s Alpha was subsequently used. Cronbach’s Alpha is a measure of reliability analysis. The generally agreed upon lower limit for Cronbach’s alpha is 0.70 although it may decrease to 0.60 in exploratory research (Hair et al. 1998). The research shows that the Cronbach’s Alpha is acceptable as the research is exploratory (Table 2).
Table 2: Reliability analysis results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Source of items used in the research</th>
<th>No. of items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business-IS alignment</td>
<td>Kearns and Sabherwal (2007); Viaene et al. (2007)</td>
<td>4</td>
<td>0.687</td>
</tr>
<tr>
<td>CRM process-IS alignment</td>
<td>Reinartz et al. (2004); Chen and Ching (2004)</td>
<td>8</td>
<td>0.798</td>
</tr>
<tr>
<td>CRM performance</td>
<td>Kim et al. (2003); Chen and Ching (2004)</td>
<td>6</td>
<td>0.639</td>
</tr>
<tr>
<td>Organizational performance</td>
<td>Kearns and Sabherwal (2007); Mercken (2004)</td>
<td>4</td>
<td>0.682</td>
</tr>
</tbody>
</table>

Consequently, correlation analysis was used to determine the association between constructs (Table 3).

Table 3: Correlation analysis results

<table>
<thead>
<tr>
<th></th>
<th>Organizational performance</th>
<th>CRM performance</th>
<th>CRM process-IS alignment</th>
<th>Business-IS alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational performance</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRM performance</td>
<td>0.713**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRM process-IS alignment</td>
<td>0.653**</td>
<td>0.618**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Business-IS alignment</td>
<td>0.658**</td>
<td>0.628**</td>
<td>0.695**</td>
<td>1</td>
</tr>
</tbody>
</table>

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

The findings reveal that there are positive and significant relationship (i) between CRM performance and organizational performance (H1) (ii) between CRM process-IS alignment and CRM performance (H2a) (iii) CRM process-IS alignment and organizational performance (H2b) (iv) Business-IS strategic alignment and CRM performance (H3a) (v) Business-IS strategic alignment and organizational performance (H3b) (vi) Business-IS strategic alignment and CRM process-IS alignment (H4). The highest correlation is found between organizational performance and CRM performance. This implies that a strong CRM performance is imperative for better organizational performance among Malaysian SME. Further, the results suggest that a stronger CRM alignment is critical to achieve higher CRM performance which in turn leads to better organizational performance. Hence, all hypotheses were supported.
5. CONCLUSIONS

Moving toward e-business demands organizations to put in place applications that can render one-stop support to all organizational information needs. CRM is one particular enabler. Considering that research in CRM alignment still lacks, the research explores and proposes a model to aid researchers and practitioners alike in gaining insights into CRM alignment and its impact on performance. The research has proposed a research instrument and model for CRM alignment. The instrument has shown reliability while the model demonstrated relationships in the Malaysian SME context. For researchers, the results provide a starting point for future research opportunities. For practitioners, especially chief marketing officers, relationship managers and directors of sales, the research provides an insight into the components of CRM alignment and impact of CRM alignment. Future research areas include examining antecedents of CRM alignment and confirming the research model.

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