THE IMPACT OF ELECTRONIC CUSTOMER RELATIONSHIP MANAGEMENT (E-CRM) ON THE BUSINESS PERFORMANCE OF SMALL COMPANY

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ABSTRACT

Small company has a relatively simple e-CRM to improve their customer relationships and information gathering management to create competitive advantage. The use of e-CRM for small company is in a different context as compared to that for the large company. The technology acceptance model was used to investigate the relationship of perceived usage of e-CRM with business performance of all the identified seventy-one (71) small companies that sell cars at Batu Pahat town. Relationship marketing principles have seldom been applied to the small and medium-sized enterprise (SME). Mean test and multiple regression were used to examine internet CRM and business performance.

KEYWORDS: e-CRM, Customer relationship management, small company, performance.

1.0 INTRODUCTION

The concept of CRM is not new. Businesses have been managing their relationship with those who buy their goods and services for as long as there has been trading. Today’s market competition to attract customers is fierce and never easy. Increasing customer expectations and market pressure are causing dramatic increase in business competition. These factors are forcing companies to shift their approach to get customers (Xu et al. 2002). Retailer who is in the front end supply chain and interacts directly with customers is in the better position to fully understand what to improve for better customer satisfaction and encourage repeat purchases (Feinberg and Kadam 2002).

Internet plays a vital role in human life. It has brought tremendous changes in the management (e-CRM) to the marketing activities, tools and techniques, business landscape including managing of customer...
relations too. A working definition made by (Lee-Kelley et al. 2003) refer
electronic customer relations delivered over the Internet (using
technologies such as Web sites and e-mail, data-capture, warehousing and
mining) with specific aim to locate, build and improve long-term customer
relationships to enhance their individual potential. Well defined customer
segmentation will lead to effective marketing trend and increasing
profits. Enabling technologies, such as the internet is an important tool in
identifying the difference through prioritising user behavior and attitudes
toward the company’s products. Implementation of e-CRM tools is able to
enhance the effectiveness of company operations and provides value for
companies that adopt it (Adebanjo 2003).

However, relationship marketing principles have seldom been applied to
the small and medium-sized enterprise (Harrigan et al. 2008). World Bank
identifies small business in terms of manpower between 5 to 49 people.
Harrigan et al. (2009) reported that SMEs are performing e-CRM to
varying extents, reaping a range of performance benefits and facing a
range of challenges. SMEs are not adopting e-CRM the way the big
company do, as described in the large organisation-biased literature, but
they are adopting relatively simple Internet based technologies to improve
their customer communication and information management capabilities
and thus to create competitive advantage in their own strategic way.

Therefore, this study has been carried out to explore the level of e-CRM
usage in the small companies and the relationships between perceived
uses of e-CRM with company business performance.

2.0 BACKGROUND OF STUDY

2.1 Problem Statement

Customer relationship management (CRM) has been regarded as strategic
process-oriented management (Lambert 2010; Payne and Frow 2006;
Zablah, Bellenger and Johnston 2005). Greenberg (2001) emphasized that
the application of Internet CRM is able to support customer generic
strategy. E-CRM is an extension of relationship marketing drawing on
Internet based technology to enhance its strength and capabilities (Ortega
et al. 2008). Most studies on e-CRM were focused on big organizations
located in United States of America and Europe (Xu et al. 2002; Boyle 2001;
Gronroos 2004; Hunt and Morgan 1994). Current e-CRM research has
emphasized larger firms, while the adoption of e-CRM among SMEs has not been well examined. Greve and Albers (2006) reported that additional research is needed to understand whether and how capabilities of E-CRM technology provide a factor for E-CRM success.

Unlike large organisations, SMEs do not have the resources to engage in formal market research, thus making the relationships they maintained with customers a key source of valuable information (Keh et al. 2007). The related practices and knowledge learned from the bigger organization are also difficult to transfer or be generalised to SME which is located at the peripheral economies (McGowan and Durkin 2002).

2.2 Research Objectives

The objectives of this study are as follow:

2.2.1 To determine the level of e-CRM usage by the companies that sell cars located in the Batu Pahat town.

2.2.2 To determine the relationship between e-CRM usage and performance of these small companies.

2.3 Research Questions

To provide better insights into the areas that enable car sellers to better deal with their markets, the following research questions were formulated:

2.3.1 What are the levels of uses of e-CRM among the small companies that sell cars in Batu Pahat?

2.3.2 Is there a relationship between the perceived uses of e-CRM in small company with its business performance?

2.4 Scope Of Study

This study was conducted at Batu Pahat, a town located in the state of Johor, Malaysia. All the identified seventy-one (71) companies that sell car are used in this study. These companies that sell cars are small companies. The manager of the company or his representative responded to the survey questionnaire.
2.5 Significance Of The Study

Smaller companies usually do not have the resources like the bigger companies to engage in formal research. Current researches are difficult to generalize to the smaller companies. Thus, this study has the potential to provide awareness to the smaller companies on the uses of e-CRM and improvement to their management. Such study will also be able to provide new evidence and reference material to researchers who are interested to further delve in this area.

3.0 RESEARCH METHODOLOGY

3.1 Research Framework

The research framework for this study is presented as in Figure 1.

![Figure 1 Research Framework](image)

3.2 Type of Study

This is a cross-sectional study. Survey method was employed to collect the data to answer the research questions. It is conducted among the targeted population through self-administrated questionnaire. The unit of analysis is the company business. The manager of the company or his representative answered the specified questions in the questionnaire.

3.3 Population

All the identified seventy-one (71) companies that sell cars at Batu Pahat town were used in this study. Table 1 tabulates the characteristics or profile of the responding companies. Of a total 71 respondents, 41 of them are owner, CEO or Director, 20 of them are Manager and the remaining 10 of them are staff of the companies, among them 17 aged 21-25 years of age,
46 aged 26 to 40 and the remaining 8 who answered the questionnaire aged of above 40 years old. A total of 19 respondents possess secondary school qualifications, 26 of them are holder of Diploma and the rest of them Degree level. A total of 31 companies have employees of less than 10 people and the remaining 40 companies employed between 10 to 50 employees. Of the 71 companies, 47 of them are located in the urban, 22 at sub-urban and the remaining 2 of them at the outskirt of the town.

3.4 Questionnaire Design and Measurement

The survey Questionnaire Form used this study is made up of three parts. Part A is questions requiring respondent to answer about their background and his or her company, Part B is questions about the respondent perception towards their perceived uses of e-CRM in their business covering items on usefulness, ease of use, credibility, intention and adoption of the uses of e-CRM. Finally, Part C comprises of questions related to company performance and its productivity.

Questions related to perceived uses of e-CRM were adapted from that used by Sentosa et al. (2010), El-Kashier et al. (2009) and Wang et al. (2003). These questions were constructed based on the technology acceptance model - TAM (Davis 1989) which was adapted from the theory of reasoned action (Ajzen and Fishbein 1980), (Fishbein and Ajzen 1975) and theory of planned behavior (Ajzen 1985 and 1991). The purposes of TAM are specifically to explain the determinants of information technology end-user’s behavior towards information technology (Saade et al. 2007). Davis (1989) found that the influence of external variables on intention is mediated by perceived ease of use and perceived usefulness. Davis et al. (1989) found that intention is directly related to actual usage behavior.

The 5 variables of perceived uses of e-CRM in business that were adapted are perceived usefulness (4 items), ease of use (5 items), creditability (5 items), intention (5 items) and adoption (6 items). The scaling used in this research is the 5-point Likert scale of 1-strongly disagree, 2-disagree, 3-neutral, 4-agree and 5-strongly agree. There are 7 items related to variable on company business performance.

The reliability test of these measurements are tabulated in Table 2.0. Cronbach's alpha was used to assess the consistency of the entire scale. Reliability scores greater than 0.70 are considered acceptable (Hair et al. (1998). All reliability coefficients were acceptable.
The 4 items on usefulness of e-CRM cover questions about usage of e-CRM in improving the individual performance, productivity, effectiveness and simplify works. The 5 items on ease of use are on how e-CRM ease in providing the needed information for decision making, helps in providing clear and understandable information, flexible to interact with, ease in use and understand. The 5 items on creditability of uses of e-CRM are on confidentiality, confidence of use, safe to use, and consistency of its purpose. The 6 items on intentions of usage are the advantage of use, the encouragement and whether user like to use e-CRM. Finally, the 6 items on adoption are on cost and time, level of adoption, adoption to support business process, and the projection of better returns in using e-CRM.

The 7 items that measures company business performance are improved operations, improve marketing, better sales, improve profit, high sales turnover, better sales competitiveness and higher productivity.

4.0 ANALYSES AND FINDINGS

4.1 Levels of perceived uses of e-CRM and Performance

Table 3.0 tabulates the levels of perceived uses of e-CRM and performance. It is observed that the levels of perceived uses of e-CRM are very good for usefulness, ease of use, intention and adoption, and is good for the item on creditability. The level of business performance is found to be at very good level.

4.2 Correlations Analysis

The correlations result between the variables studied is tabulated in Table 4.0. It indicated that all the components making up the perceived uses of e-CRM are correlated with company business performance of company that sell car at level of p<0.001.

4.3 Regression of Perceived uses of e-CRM in business

The result of regression of perceived uses of e-CRM in business with company business performance is tabulated in Table 5.0 and 6.0. Table 5.0 indicates that R² change is .807 and the relationship is significant at p<0.001. This implies that all the 5 five factors of perceived uses of e-CRM explained a total of 80.7% of variation in enhancement of company business performance. For multiple regression analysis, the minimum R²
for statistical significant with a power of 0.80, 5 independents variables and sample size of 50 at 0.01 and 0.05 levels are respectively 29% and 23% (Hair et al. 1998). In this study the sample size is 71 with 5 independent variables and the $R^2$ is 80.7 %, indicating that the regression model is valid. The Durbin Watson value of 2.054 also suggests that the result of the regression of perceived uses of e-CRM in business with Company Business performance model is valid.

Table 6.0 indicates that standardized beta for usefulness, intention and adoption factors of the perceived uses of e-CRM in business are not significant. On the other hand, the significant standardized beta of 0.404 (with t value of 4.530) for ease of use and 0.353 (with t value of 4.138) for creditability of use of e-CRM indicate that these two variables have significant relationship with the dependent variable at $p<0.001$ level. This implies that the factors, ease of use and creditability of perceived uses of e-CRM are significantly related to company business performance at $p<0.001$ level.

5.0 DISCUSSION, RECOMMENDATION AND CONCLUDING REMARKS

5.1 Perceived Usefulness

Perceived usefulness is the extent to which a person believes that using a particular system will enhance his or her job performance (Davis 1989). This study found that the perceived usefulness of e-CRM is very good in small companies that sell car. Thus, the use of e-CRM is able to enhance the individual job performance, productivity, effectiveness and simplify works. The tools and technology of use of internet in CRM basically facilitate the interaction between the company and its customers as these support the CRM activities. These tools including e-mail and websites are also referred as front-office tool or operation CRM tools by Ang and Buttle (2006).
Table 1.0 General characteristics of the respondents (n=71)

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Position</td>
<td>a. Owner / CEO/Director</td>
<td>41</td>
<td>57.7</td>
</tr>
<tr>
<td></td>
<td>b. Manager</td>
<td>20</td>
<td>28.2</td>
</tr>
<tr>
<td></td>
<td>c. Staff</td>
<td>10</td>
<td>14.1</td>
</tr>
<tr>
<td>Age (years)</td>
<td>a. 21-25</td>
<td>17</td>
<td>23.9</td>
</tr>
<tr>
<td></td>
<td>b. 26-40</td>
<td>46</td>
<td>64.8</td>
</tr>
<tr>
<td></td>
<td>c. &gt;41</td>
<td>8</td>
<td>11.3</td>
</tr>
<tr>
<td>Education</td>
<td>Secondary School</td>
<td>19</td>
<td>26.8</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>36</td>
<td>50.7</td>
</tr>
<tr>
<td>No. of Employees*</td>
<td>a. &lt;10</td>
<td>31</td>
<td>43.7</td>
</tr>
<tr>
<td></td>
<td>b. 10-50</td>
<td>40</td>
<td>56.3</td>
</tr>
<tr>
<td>Location of</td>
<td>a. Urban</td>
<td>47</td>
<td>66.2</td>
</tr>
<tr>
<td>Business</td>
<td>b. Sub-urban</td>
<td>22</td>
<td>31.0</td>
</tr>
<tr>
<td></td>
<td>c. Outskirt</td>
<td>2</td>
<td>2.8</td>
</tr>
</tbody>
</table>

* World Bank defined that small business in terms of manpower has between 5 to 49 people/employees.

Table 2.0 Reliability of measurements

<table>
<thead>
<tr>
<th>No</th>
<th>Description of Measures</th>
<th>Number of Items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perceived uses of e-CRM in business – Usefulness</td>
<td>4</td>
<td>0.726</td>
</tr>
<tr>
<td>2</td>
<td>Perceived uses of e-CRM in business - Ease of use</td>
<td>5</td>
<td>0.837</td>
</tr>
<tr>
<td>3</td>
<td>Perceived uses of e-CRM in business - Creditability</td>
<td>5</td>
<td>0.814</td>
</tr>
<tr>
<td>4</td>
<td>Perceived uses of e-CRM in business – Intention</td>
<td>5</td>
<td>0.795</td>
</tr>
<tr>
<td>5</td>
<td>Perceived uses of e-CRM in business - Adoption</td>
<td>6</td>
<td>0.778</td>
</tr>
<tr>
<td>6</td>
<td>Company Performance</td>
<td>7</td>
<td>0.859</td>
</tr>
</tbody>
</table>

Table 3.0 Levels of perceived uses of e-CRM and performance (N=71)

<table>
<thead>
<tr>
<th>No</th>
<th>Perceived uses of e-CRM in business and Performance</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Level of Perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Usefulness</td>
<td>4.01</td>
<td>.52</td>
<td>V. Good</td>
</tr>
<tr>
<td>2</td>
<td>Ease of use</td>
<td>3.95</td>
<td>.58</td>
<td>V. Good</td>
</tr>
<tr>
<td>3</td>
<td>Creditability</td>
<td>3.27</td>
<td>.49</td>
<td>Good</td>
</tr>
<tr>
<td>4</td>
<td>Intention</td>
<td>3.90</td>
<td>.51</td>
<td>V. Good</td>
</tr>
<tr>
<td>5</td>
<td>Adoption</td>
<td>3.83</td>
<td>.54</td>
<td>V. Good</td>
</tr>
<tr>
<td>6</td>
<td>Business Performance</td>
<td>4.01</td>
<td>.55</td>
<td>V. Good</td>
</tr>
</tbody>
</table>

Index Range is based on [29] where 1.00-2.49 = Low; 2.50 - 3.69 Good and 3.7 - 5.00 = Very Good
There is correlations between perceived usefulness of e-CRM with business performance. However, the standardized coefficient beta of the regression model does not indicate significant relationship.

5.2 Perceived ease of use

Perceived ease of use is about the extent the person accepts using services with no additional cost and has been posited as to which a person believes that using a particular system will be free of effort (Davis 1989; Sanders and Manrodt 2003). From the user’s perspective, Ramayah and Lo (2007) found that systems or technologies which appeared to be easy to use and easy to understand would be more useful. This study found that the perceived ease of use of e-CRM among the small companies is very good. The e-CRM has been able to provide the needed information for decision making, helps in providing clear and understandable information, flexible to interact with, ease in use and understand.

There is significant correlation between perceived ease of use of e-CRM with business performance. The standardized coefficient beta indicates significant relationship. According to Gefen and Straub (2000), perceived ease of use will vary with the type of task being addressed. They hypothesized that ease of use will not have an important influence on usage for something that is task oriented, like purchasing on-line but will be significant for essential task like gathering information for decision making. Thus, it probably explains the high level of perceived ease of use of e-CRM as it involves gathering information for decision making.

5.3 Perceived Credibility

Perceived credibility refers to security and privacy. Security is about the protection of information or systems from unsanctioned intrusions or outflows, while privacy is the protection of various types of data that are collected (with or without the knowledge of the users) during users’
interactions with the internet (Hoffman et al. 1999). The 5 items on creditability of uses of e-CRM in this study comprises confidentiality, confidence of use, safe to use, and consistency of its purpose. The level of perceived creditability in the use of e-CRM is found to be good. There is correlation between perceived creditability in the use of e-CRM with business performance. The beta standardized between these two variables is also significant.

5.4 Perceived Intention

Intention is an indication of a person's readiness to perform a given behavior, and it is considered to be the immediate antecedent of behavior (Bagozzi et al. 1989). In this study, there are 6 items that measure the intentions of usage. These items covers the decision aspect on the advantage of its use, the encouragement and whether user like to use e-CRM. The intention of use of e-CRM was found to be very good. The correlation between intention of use of e-CRM is significant. However, the standardized beta is found to be not significant relationship between the two variables.

5.5 Perceived Adoption

According to Ajzen and Fishbein (1980), adoption is the manifest, observable response in a given situation with respect to a given target. Single behavioral observations can be

Table 5.0 The relationship between perceived uses of e-CRM in business and company business performance

<table>
<thead>
<tr>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>.807</td>
<td>.792</td>
<td>.807</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>54.22</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. F Change</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.0 The relationship between perceived uses of e-CRM in business and company business performance

<table>
<thead>
<tr>
<th>Regression Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.006</td>
<td>.287</td>
<td>-.023</td>
<td>.982</td>
</tr>
<tr>
<td>Usefulness</td>
<td>-.016</td>
<td>.083</td>
<td>-.016</td>
<td>.844</td>
</tr>
<tr>
<td>Ease of use</td>
<td>.381</td>
<td>.084</td>
<td>.404</td>
<td>.000</td>
</tr>
<tr>
<td>Creditability</td>
<td>.390</td>
<td>.094</td>
<td>.353</td>
<td>.000</td>
</tr>
<tr>
<td>Intention</td>
<td>.176</td>
<td>.102</td>
<td>.165</td>
<td>.089</td>
</tr>
<tr>
<td>Adoption</td>
<td>.160</td>
<td>.081</td>
<td>.155</td>
<td>.053</td>
</tr>
</tbody>
</table>
aggregated across contexts and times to produce a more broadly representative measure of behavior.

In this study, the measures of perceived adoption of e-CRM are on cost and time, level of adoption, adoption to support business process, and the projection of better returns in using e-CRM. The perceived use of e-CRM among is very good. There is significant correlation between perceived adoption and company business performance.

5.6 Recommendations
This paper attempts to provide some useful insight into e-CRM in small business. Based on the literature reviews, the researchers highlighted as well as discussed the important elements contributing to the business performance of e-CRM in small companies.

5.7 Small Companies
Business strategies drive CRM development. Uses of e-CRM enhance business performance. In small companies, the decision making is reserved at the top. E-CRM emphasises on communication and prompt solving of customer’s problems. The quality and usability of any CRM system is dependent upon the recency and validity of the data in its data bases. In this case, decision makers are fed with latest inputs. Technological interfaces allow for simpler and more extensive data collection from consumers than person-to-person interfaces and such activities are more efficient and effective as compared to the very labour intensive activities.

The emergence of competition based on customer service quality, customer loyalty and retention, CRM, and pre- and post-sale services have prompted the rapid demand and deployment of large scale customer relations management.

Thus, although being small company, it will benefit more if not better because when implement in such an environment decisions making will be prompt since the top management are there to make the decision.
5.8 Researchers

It is hoped that this exploratory research has laid the foundation for further examination of e-CRM in the small company context. Future research will add explanation through in-depth qualitative methods, while the potential exists to replicate the study in other countries.

Only large companies selling expensive durable goods may be able to afford building these full integrated databases in the CRM systems that surround them. As such, future work may include study of databases and information storage of CRM in small company, how CRM data are stored and retrieved effectively and efficiently in these small businesses.

5.9 Conclusion

The perceived uses of e-CRM are its usefulness, ease of use, creditability intention and adoption. This study found that small companies that sell car have very good level of perceived usefulness, ease if use, intention of use, adoption and with good level of creditability in using e-CRM. The business performance of these companies is also very good. Perceived uses of e-CRM in small company are also found to be significantly related with its business performance.

6.0 REFERENCES


