

CRM and Business Performance

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Abstract CRM is a business strategy which aims to create value for both organization and customers through initiating and maintaining customer relationships. As a core strategy, CRM is based on using a marketing information system and the company's IT infrastructure. CRM technology plays an important role in creating customer knowledge, which is the core of any CRM initiative. The CRM strategy will not yield the expected results without the proper use of information technology in the CRM processes. Organizational CRM readiness is related to the level of available technological resources which may be oriented towards CRM implementation. This paper examines the direct outcomes of the CRM activities, as well the relationship among these outcomes and business performance. We also analyzed the effect of the level of organizational CRM readiness on the degree to which companies implemented CRM activities. We conducted a survey on 50 companies operating in the Armenia, which revealed that CRM implementation generates superior business performance.

Keywords Business Performance, CRM Activities, CRM Readiness

1. Introduction

The Customer Relationship Management (CRM) concept has its roots in the Relationship Marketing theory, which is considered one of the main areas of modern marketing development, generating a variety of topics for researchers [1],[2]. Often, both in academic and business literature, the terms "relationship marketing" and "customer relationship management" are used as synonyms [3]. 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 [4]. This is underlined by Gronross [5], who states that the purpose of relationship marketing is to establish, maintain and enhance relationships with customers and other partners. Nevin [6] points out that CRM is a concept used to reflect a variety of themes and perspectives. Some of these issues provide a narrow perspective on CRM. At tactical level, CRM is database marketing or electronic marketing [7],[8]. At strategic level, the goal of CRM is to create value both for customers and shareholders. Thus, CRM involves the use of information technology and focuses on individual customer relationship to design a strategy for maintaining long term relationships with customers [7].

Both relationship marketing and customer relationship management focus on cooperation and collaboration between the company and its customers, and/or among other participants in the relationship. Dwyer et al. [9] have

characterized such relationships as interdependent and long-term oriented, rather than being focused on short-term discrete transactions. According to Boulding et al. [10], CRM is the result of continuous development and integration of marketing ideas, available data, technologies and organizational approaches, which is an operational platform relationship marketing manifestation.

2. Theoretical Background

There is a variety of opinions regarding the CRM conceptualization. Up to now, the researchers have not agreed on a single definition of CRM, fact which shows that this area is still in its development stage.

The main goal of CRM is to increase the marketing process productivity. This goal is achieved by increasing the marketing process' efficiency and effectiveness [11]. In the CRM approach, the marketing efficiency is achieved through collaboration and cooperation processes, which help reduce transaction costs, as well as company development costs. CRM consists of two main processes: development of customer oriented business and building partnerships with the most important customers. These lead to creation of superior value for both parties [3].

The literature review conducted by Zablah et al. [12] identified five conceptualizations of CRM: strategy, technological instrument, process, capability and philosophy. As a strategy, CRM differentiates customers based on their loyalty and profitability. Customer relationships should be managed selectively, and resource allocations should be based on customer value. In this view, the goal of CRM is maximizing business performance by managing the customer relationship portfolio.

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As a technological instrument, CRM requires the integration of IT&C in the customer-related processes, as a prerequisite for CRM strategy implementation. Using information technology, companies are able to collect, store, analyse and disseminate customer knowledge, which increases the company's ability to respond to individual customer needs.

Technology development represents the foundation for the integrated CRM approach, as technology allows for integration of customer data with market data. The integrated databases are used for market [13].

However, CRM technology adoption is not enough for CRM strategy implementation. Given that CRM strategy is focused on increasing customer lifetime value, CRM technology is the instrument that allows for this goal to be attained by: storing data collected from various customer contact points, providing analytical tools for assessing the customer lifetime value, estimating the net present value of marketing campaigns, purchasing behaviour modelling.

According to Buttle [14], this technology enhances the customer communication and collaboration processes, which ultimately increases the supplied value. Therefore, CRM technology adoption represents the integration of information technology into the customer-oriented processes, as part of CRM strategy implementation. Organizational CRM readiness is related to the level of available technological resources which may be oriented towards CRM implementation. As a result of adopting the information technology, the company is able to manage the customer knowledge and increase its ability to customize its response to the individual customer's needs [13].

CRM implementation requires an integrated approach to the customer database and the marketing information system, as well as employing specific data mining tools [15].

As a capability, [16] CRM represents the mix between customer knowledge and the skills to develop and manage individual customer relationship.

As a process, CRM has been defined from two perspectives: (1) macro level: aggregate process of building profitable and mutually beneficial relationships with customers, a process that includes sub-processes ([17], [1], [18]) and (2) micro level: only manage interactions with customers, to develop and maintain profitable relationships with them in the long run [19].

As a philosophy, CRM is focused on customer relationship initiating, maintaining and enhancing.

Viewed as a process, CRM involves initiating, maintaining and terminating customer relationships across all contact points with customers, in order to maximize the relationship portfolio value [1].

According to Boulding et al. [10], the success of the CRM project relies on strategic planning. Before adopting CRM, the organization should conduct business environment analysis, to identify development opportunities and to take decisions regarding the customer relationships to be initiated. It is important for the company to have a clear view of the

reasons for which the customers are willing to enter in a relationship.

The customers should be viewed as major stakeholders, not as a target market [23]. The success of a CRM project depends also on the company's clear view on its current market positioning and its future role on the market. And this view has to be consistent with the marketing concept – company-wide focus on customer. The operational dimension is related to various projects of automating sales, services and marketing processes [14]. The software solutions suppliers provide a wide range of CRM solutions for automating the sales, marketing and services functions.

The automating is implemented by using software which allow for customer segmentation, communication campaigns management and response to customers' requests. Regarding the sales force, the automating is related to opportunities management, contacts management, generating and customizing the offers. CRM software is also used in estimating customer lifetime value, targeting potential customers and allocating them to the sales force team members. The analytical dimension is related to measuring the customer relationship outcomes, to customer data analysis and decision-making (based on customer knowledge) regarding marketing strategies and tactics [24]. This CRM dimension includes activities related to customer data collecting, storing, analysis, interpretation and use [22]. It uses special data mining and forecasting techniques, aimed at identifying potential customers, establishing customer profiles and purchasing behaviours [25]. The collaborative dimension is related to the interactions between the company and its customers at all contact points [21].

Web portals use led to the development of the collaborative dimension of CRM [26]. Many companies are facing the challenge of using the Internet for enhancing customer communication channels. The challenge resides in managing the risk of conflicts among various communication channels.

The channels should be complementary and communicate consistent messages [27]. CRM software solutions may coordinate the channel-specific communication flows. The collaborative dimension integrates CRM with other company systems. CRM may also be extended to employees, suppliers and other business partners. CRM software solutions (integrated into web portals) allow for co-ordination of partners-related processes. This way, it is easier to manage information regarding customers, orders, stocks, product ranges etc. The CRM outcomes are influenced by several CRM implementation issues [10]; technological systems and processes are decisive for CRM activities, but without the appropriate human interactions the actual outcomes will not reach the expected level.

The goal of measuring the organizational CRM readiness is to assess the degree to which the company is prepared for CRM adoption, compared to its competitors. Ryals and Payne [28] identified several stages of CRM development: pre-CRM planning; data repository building; moderately developed; well developed and highly advanced. Each of

these stages represents a level of CRM maturity, the differences among them being the various levels of using customer data to increase customer experience quality and customer lifetime value.

3. Research Hypothesis and Model

Payne and Frow[26] believe that one of the four key areas of CRM implementation is the assessment of organizational CRM readiness. This is viewed as a key success factor of CRM implementation initiatives ([1]).

Organizations that have adopted information technology and have the ability to integrate customer data in the marketing information system, have the required resources to implement CRM. Organizational CRM readiness is an antecedent of customer relationship initiating and maintaining activities. CRM technology allows the companies to integrate all the existing customer data, existing across departments, collected through different communication channels and customer interactions.

The company is thus able to determine the individual customer profile. Based on it, the company may decide to develop the customer relationship and increase the customer's lifetime value, by offering customized products and/or services[7].

Reinartz, Krafft and Hoyer[1] consider that the level of CRM technology is a moderating variable for the relationship between the CRM adoption and business performance. Implementation of CRM activities influences business performance only when companies assign technological resources needed for these activities.

In the research model we assume that companies with the appropriate technical and informational infrastructure carry out CRM process specific activities. Thus:

Hypothesis 1: There is a positive link between organizational CRM readiness and carrying out customer relationship initiating activities.

Hypothesis 2: There is a positive link between organizational CRM readiness and carrying out customer relationship maintaining activities.

According to Izquierdo et al., the process of developing a customer relationship consists of activities aimed at: (1) customer acquisition, (2) customer retention (in order to keep the customer in the company's portfolio) and (3) maintaining the customer relationship. Jutla, Craig and Bodorik propose a framework for measuring the performance of CRM activities, using metrics such as: customer retention rate, customer satisfaction, customer profitability, customer value, product/service customization degree. Sheth and Parvatiyar's research[2] revealed that CRM activities increase business productivity by increasing the efficiency and effectiveness of marketing activities. Based on this, Teng, Ong and Ching found that CRM activities have a positive effect on cost reduction, employee productivity and product quality. Verhoeff suggested that CRM activities have a direct positive impact on customer

retention rate and customer share. Mithas et al. show that CRM activities contribute to increasing the customer-knowledge base, which, in turn, is positively related to customer satisfaction. According to Reinartz et al.[1], implementing the CRM process (such as customer relationship initiating and maintaining activities) has a positive effect on company's market share, sales growth and profitability.

Hypothesis 3: The customer relationship initiating activities have a positive impact on customer-related outcomes.

Hypothesis 4: The customer relationship maintaining activities have a positive impact on outcomes related to customer processes.

Hypothesis 5: The customer relationship initiating activities have a positive impact on customer-related outcomes.

Hypothesis 6: The customer relationship maintaining activities have a positive impact on customer processes related outcomes.

Previous research by Hallowell, Kamakura et al., Reinartz and Kumar and Reinartz et al. on customer satisfaction and customer loyalty, show that CRM process specific activities have a significant positive impact on sales growth. Meanwhile, sales growth is positively related in most cases with an increase in business profitability.

The customer acquisition process, which corresponds to the customer relationship initiation process from our research model, was found in previous research to have a positive effect on business performance.

The CRM activities outcomes (both customer related – e.g. customer satisfaction and customer loyalty – and customer processes related) should be positively related to general business performance. Thus, we formulate the following research hypothesis:

Hypothesis 7: There is a positive relationship between customer-related outcomes and business performance.

Hypothesis 8: There is a positive relationship between customer processes-related outcomes and business performance.

4. Discussions

The level of organizational CRM readiness (measured through technical and informational infrastructure and through employees' capability of integrating information technology into their work) was found to be quite high within our sample.

Our assumption that the technical and informational infrastructure development favours CRM activities is confirmed for both types of CRM activities (initiating and maintaining customer relationship). The regression coefficient is positive, indicating a positive effect of CRM organizational readiness on the actual CRM activities. These effects were found to be significant, as $p < 0.01$ in both cases. This finding is consistent with previous research ([1]) which

found that CRM technology enables the implementation of CRM activities.

However, CRM technology may have a negative effect on business performance. That is the case when organizational CRM readiness is low. Jayachandran et al. suggest that successfully implementing CRM activities is influenced both by company's ability to design a customer oriented informational system and by company's technological infrastructure.

The investigated companies carry out CRM-specific activities for both customer relationship initiation and maintenance. The main activities for customer relationship initiation were found to be: identification of customers' needs and IT-based analysis of market data gathered from various sources.

The process of maintaining the customer relationship was found to consist mainly of programmers focused on gaining customer loyalty, by offering incentives when collaboration between the two parties intensifies. This finding is consistent with the results from Reinartz et al. [1], who suggest that activities aimed at initiating and maintaining customer relationships focus on maximizing business profitability. CRM activities yield positive outcomes, both customer related and customer process-related. This result is consistent with the findings from Bohling et al. They found that the main positive outcomes of CRM implementation refer to: customer experience, customer relationship development, customer attraction rate, customer complaints management, customer retention rate and new product development. Our findings are also consistent with Hong-kit et al.: CRM specific activities have a positive effect on customer satisfaction, customer retention and sales generated by the current customers. We also confirmed Ryals' results, by finding that CRM implementation has positive effects both on customer acquisition and customer retention.

Using CRM applications has a positive effect on customer related results, especially on customer satisfaction (as Mithas et al. previously showed). Verhoef's results were also confirmed, as we found CRM activities to have a positive impact on customer retention and customer share. The effects of CRM implementation on customer related processes are partially consistent with Teng et al., who studied the effects on several general company processes. Following CRM implementation, the customer perception on the company's services has improved, as well as the response speed and accuracy to customer complaints.

The customer-related outcomes (customer retention, satisfaction and loyalty) were found to have a positive impact on business performance, results which are consistent with previous research.

The research conducted by Rust and Zahorik, Storbacka and Hallowell confirmed that customer satisfaction influences customer loyalty, which in turn has a positive effect on business profitability.

Anderson et al. showed that organizations providing a high level of customer satisfaction record high level of

profitability. Thus, a satisfied customer offers ideas for new products, is more likely to try the company's new or improved products, pays less attention to competitors' products and is less sensitive to the product price.

The positive effect of customer retention on business performance is explained by the fact that retaining a customer is usually less expensive than attracting a new customer, especially on mature markets. Customer retention should not be limited to maintaining customer value. Increasing the customer value (with an impact on overall business performance should be a permanent marketing goal).

Our research shows that companies use CRM activities to initiate and maintain customer relationships. CRM activities focus on gathering and integrating customer data available in all departments, in order to generate a unique view point concerning the customer.

Decision makers should approach CRM as an opportunity to increase customer value and to reduce the costs of attracting and retaining customers. CRM does not only allow for more efficient and effective customer relationship management, but also a more efficient and effective inside and across departments.

A possible cause for CRM implementation failures is that many companies approach CRM as an IT based solution. The use of integrated customer databases is necessary, but is not enough for CRM strategy implementation.

Given that CRM strategy is focused on customer profitability, CRM technology helps achieving this goal. Customer databases store data collected from multiple points of contact with customers. Analytical tools allow the assessment of customer lifetime value, the effects of marketing campaigns and behavioural patterns. This technology improves communication and collaboration with customers, thereby delivering superior value [25].

If the company does not have a culture focused on development of long term customer relationships, CRM implementation might not yield the expected results. In this context, CRM implementation might involve an organizational culture change, from the transactional view (focused on company's products and brands) towards the relational view.

5. Limitations and Further Research

Company size may also influence the results: large companies, with larger resources available, may be more inclined towards implementing CRM processes and technologies, while smaller companies may find this too expensive.

The available sample is too small to allow controlling for industry and company size. These issues, however, open some directions for future research.

Research at industry level might reveal the differences across industries in the intensity of the effects we studied. The market lifecycle stage may also have a moderating effect on the investigated effects: on an emergent market,

companies may tend to focus on activities related to relationship initiating, rather than on maintaining current relationships. As the market grows, the competitive battle is focused on the new customers, not on the existing ones. On an amature market, the focus of the CRM activities will be maintaining current customers (i.e. preventing them from migrating towards competitors); as new customers are few, the competitive battle focuses on the existing ones.

The stage of the CRM implementation may have an influence on business performance. The early stages of CRM implementation require financial resources to be allocated to this end. If the effect (e.g. an increase in company profits) is not readily visible (and, chances are, it is not), the short term profitability might suffer.

Future research might also focus on the possible moderating effects on the CRM – business performance relationship. Possible moderators might include external factors (environmental turbulence) as well as internal ones (such as organizational culture or company size).

6. Conclusions

We conducted a reliability analysis of our measure scales. We conducted a first order exploratory factor analysis. In this stage, we eliminated the items with a factor loading <0,5. With the retained items, we conducted a first order confirmatory factor analysis and the alpha Cronbach statistic was again computed. If no items were rejected due to low factor loadings, no confirmatory factor analysis was conducted.

After the reliability analysis, an analysis of construct validity was conducted. Construct validity was analyzed under two aspects: convergent validity and discriminant validity. After conducting the validity analysis on the constructs in our proposed conceptual model, we reached the following conclusions: All constructs were found to possess discriminant validity. Each item is significantly correlated with its construct, and this correlation is stronger than the item's correlation with any of the other constructs included in the research model.

REFERENCES

- [1] Reinartz, W., Krafft, M., Hoyer, W.D., The Customer Relationship Management Process: Its Measurement and Impact on Performance, *Journal of Marketing Research*, Vol.41, No.3, 2004, pp. 293–305
- [2] Sheth, J. N., Parvatiyar, A., *Handbook of Relationship Marketing*, Sage Publications, 2000
- [3] Parvatiyar, A., Sheth, J. N., *Conceptual Framework of Customer Relationship Management*, in Sheth, J. N., Parvatiyar, A., Shainesh, G.(eds.): *Customer Relationship Management – Emerging Concepts, Tools and Applications*, McGraw-Hill, 2001
- [4] Webster, F.E., The Changing Role of Marketing in the Corporation, *Journal of Marketing*: Vol.56., October 1992, pp.1-17
- [5] Grönroos, C., The Marketing Strategy Continuum: Towards a Marketing Concept for the 1990s *Management Decision*, Vol.29, No.1, 1991, pp.7-13.
- [6] Nevin, J.R., Relationship Marketing and Distribution Channels: Exploring Fundamental Issues *Journal of the Academy of Marketing Science*, Vol. 23, No. 4, 1995, pp. 327-334.
- [7] Peppers, D., Rogers, M., A new marketing paradigm: share of customer, not market share, *Planning Review*, vol. 23, nr. 2, 1995, pp. 14-18
- [8] Blattberg, R.C., Deighton, J., Interactive Marketing: Exploiting the Age of Addressability, *Sloan Management Review*, Vol.33, No.1, 1991 pp.5-14
- [9] Dwyer, F. R., Schurr, P. H., Oh, S., Developing Buyer-Seller Relationships, *Journal of Marketing*, Vol.51, 1987, pp. 11-27
- [10] Boulding, W., Staelin, R., Ehret, M., Johnston, W. J., A Customer Relationship Management Roadmap: What is Known, Potential Pitfalls and Where to Go, *Journal of Marketing*, Vol.69, No.4, 2005, pp.155–166.
- [11] Sheth, J. N., Sisodia, R. S., *Improving Marketing Productivity*, in Heilbrunn, J. (Ed.), *Marketing Encyclopedia*, American Marketing Association/NTC Publishing, 1995
- [12] Zablah, A. R., Bellenger, D. N., Johnston, W. J., An Evaluation of Divergent Perspectives on Customer Relationship Management: Towards a Common Understanding of an Emerging Phenomenon, *Industrial Marketing Management*, Vol.33, No.6, 2004, pp. 475–489.
- [13] Mahmoud, Z., The Promise and Limitations of Service Oriented Architecture, *International Journal of Computers*, Vol. 1, Issue 3, 2007, pp. 74-78
- [14] Buttle, F., *Customer Relationship Management. Concepts and Tools*, Butterworth Heinemann Publishing, 2006
- [15] Maalouf, L., Mansour, N., Mining Airline Data for CRM Strategies, *Proceedings of the 7th WSEAS International Conference on Simulation, Modelling and Optimization*, Beijing, China, September 15-17, 2007, pp. 345-350
- [16] Day, G.S., The Capabilities of Market-driven Organizations, *Journal of Marketing*, Vol.58, No.4, 1994, pp. 37-52.
- [17] Srivastava, R.K., Shervani, T.A., Fahey, L., Marketing, Business Process and Shareholder Value: An Organizationally Embedded View of Marketing Activities and the Discipline of Marketing, *Journal of Marketing*, Vol. 63, 1999, pp. 168-179.
- [18] Payne, A., Frow, P., (2005) A Strategic Framework for CRM, *Journal of Marketing*, Vol. 69, No.4, 2005, pp. 167–176.
- [19] Grönroos, C., *Service Marketing and Management: A Customer Relationship Management Approach*, John Wiley & Sons, 2000
- [20] Goodhue, D.L., Wixom, B.H., Watson, H.J., Realizing Business Benefits through CRM: Hitting the Right Target in the Right Way”, *MIS Quarterly Executive*, Vol. 1, Issue. 2, pp. 79-94

- [21] Greenberg, P., CRM at the Speedlight: Capturing and Keeping Customers in Internet Real-Time, 2nd edition, McGraw Hill, 2002
- [22] Payne, A., Handbook of CRM: achieving excellence in customer management, Butterworth-Heinemann, 2006
- [23] Palmatier, R.W., Scheer K R., Arnold, T.J., Achieving relationship marketing effectiveness in business-to-business exchanges, Journal of the Academy Marketing Science Vol. 36, 2008, pp 174-190
- [24] Ang, L., Buttle, F., CRM software applications and business performance, Journal of Database Marketing & Customer Strategy Management Vol. 14, No. 1, 2006, pp. 4-16;
- [25] Shen, C.C., Chuang, H.M., A Study on the Applications of Data Mining Techniques to Enhance Customer Lifetime Value, WSEAS Transactions on Information Science and Applications, Issue 2, Volume 6, February 2009, pp. 319-328.
- [26] Payne, A., Frow, P., Customer Relationship Management. From Strategy to Implementation, Journal of Marketing Management, Vol.22, 2006, pp. 135-168
- [27] Ab Hamid, N.R., Ahmad, F., Tahir Shas, S.N., Arshad, N.H., Evaluating the Adoption Level of Electronic Customer Relationship Management by Telecommunication Companies, WSEAS Transactions on Systems, Issue 2, Volume 9, 2010, pp. 115-124.
- [28] Ryals, L., Payne, A., Customer Relationship Management in Financial Services: Towards Information Enabled Relationship Marketing, Journal of Strategic Marketing, Vol. 9, 2001 pp. 3-27