



SCIENTIFIC RESEARCH CENTER

International Journal of Business Economics and Management Studies

ISSN 2348-3016

Volume 1, Issue 2, pp. 19-34

Developing CRM strategies with using balance score card approach in Semnan West Steel Company

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Abstract

Since the BSC has been introduced, many companies have accepted it as the foundation for their strategic management system and this helps to the managers to align their businesses with the new strategies in the direction of growth opportunities based on further flexibility, value-added products and services and costs' reduction. The purpose of this study is to develop strategies of CRM with use of BSC in Semnan West Steel. The sample of the research was 175 of managers and customers of the company with 30 of management professors of Semnan University. With use of Paired comparisons and AHP method, weight of score card for CRM and weight of success factors were determined and with use of weight of each factor, final rank of key factors were determined. Managerial discussion has been discussed in conclusion.

Keywords: customer relationship management, balance score card, strategy, AHP

1- Introduction

Customer Relationship Management (CRM) has become one of the leading business strategies in the new millennium. The essence of CRM is to change organizations from a products-centric to customer-centric philosophy in order to gain a sustainable and valuable competitive advantage. CRM system offers valuable help in many fields. For example, it helps companies to face the challenges and difficulties to meet customer expectations and solve their problems, it allows them to identify their customers and their needs very well, and ensure customer satisfaction and loyalty to the company (Bose, 2002).

Implementing CRM usually requires large investments not only in technology, but also in labour resources, consulting services and training. In spite of this, many CRM initiatives fail to deliver benefits commensurate with their costs. The reasons for the failure of many CRM initiatives range from technological implementation problems, to a lack of organizational integration and acceptance, to a focus on technology instead of customer centricity. For that, the organizations are recommended to have a measurement system to manage and assess the effectiveness of CRM initiatives depending on the old axiom "if you can't measure it, you can't manage it" (Bradshaw, 2001).

One of the effective performance measurement methods is the Balanced Scorecard (BSC). The balanced scorecard is a set of measures that gives top managers a comprehensive view of the business from four perspectives: financial, customers, internal business processes, and innovation and learning. But while BSC is a powerful strategic measurement system, it needs to be adapted to become suitable to measure the effectiveness of CRM (Chen, 2004).

Despite prior works in both realms of CRM and BSC. There is still a gap in literature regarding developing CRM strategies with use of BSC. Therefore in this study we first identified mission, vision and strategies of the Semnan West Steel regarding each dimensions of the balance score card. At the next stage, for identifying success factors, theoretical concepts were investigated and interviews were held. At the next section we will review related concepts and prior studies and in the methodology, the methods will be discussed.

2- Literature review

CRM is a strategy used to learn more about customers' needs and behaviors in order to develop stronger relationships with them. CRM is as old as the market economy. Sellers try to manage customer relationships to create additional value for their customers and for themselves. But, the new is software tools to help companies improve customer acquisition and retention grow the share of customer's spending and improve understanding of customer profitability. However, CRM is not just a technology but rather a comprehensive, customer-centric approach to an organization's philosophy of dealing with its customers. Some potential benefits of CRM are as follows:

- Increased customer retention and loyalty.
- Higher customer profitability.
- Creation value for the customer.
- Customization of products and services.
- Lower process, higher quality products and services (Chen et al., 2003).

2.1. CRM Architecture

According to the Meta group, CRM systems can be classified into the following three subcategories:

- **Operational CRM systems** improve the efficiency of CRM delivery and support processes. They comprise solutions for marketing, sales and service automation, e.g., campaign management systems and systems for customer interaction centres.
- **Analytical CRM systems** store and evaluate knowledge about customers for a better understanding of each customer and his behaviour. They therefore support the CRM analysis processes. Examples are data warehousing, online analytical processing (OLAP) and data mining systems.
- **Collaborative CRM systems** manage and synchronize customer interaction points and communication channels (e.g. telephone, email, and web). But each of these sub-systems is dependent on the other. For instance; analytics drives the decision making in operational CRM for the deployment of marketing, sales and customer service processes (Bull, 2003).

But without the data collected via the operational CRM processes, analytical CRM wouldn't have any data to work with. And the data processed by the analytical CRM tools couldn't be effectively disbursed and strategic decision- making wouldn't occur without collaborative CRM . Therefore, the architecture of a general CRM system is

proposed in and it is comprised of these three subsystems, figure 1 shows the architecture of the general CRM system (Ham, 2002).

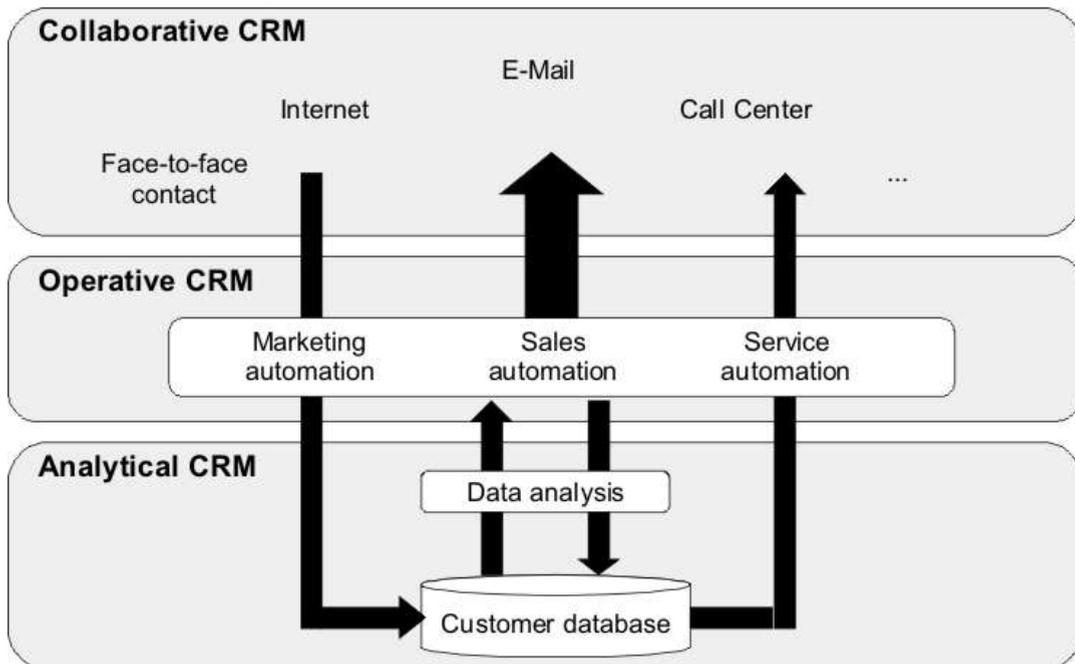


Figure 1. Architecture of the general CRM system

Balanced Scorecard (BSC)

The balanced scorecard is a strategic planning and management system used to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organizational performance against strategic goals. It was originated by Drs. Robert Kaplan and David Norton the early 1990s as a set of measures that gives managers a balanced view of organizational performance. It includes financial measures that tell the results of actions already taken. And it complements the financial measures with operational measures on customer satisfaction, internal processes and organization's innovation and improvement activities. These operational measures are the drivers of future financial performance. BSC allows managers to look at the business from four different perspectives (Hwang, 2010):

1) Financial: How do we look to shareholder?

- 2) Customer: How do customers see us?
- 3) Innovation and learning: can we continue to improve and create value?
- 4) Internal business processes: what must we excel at?

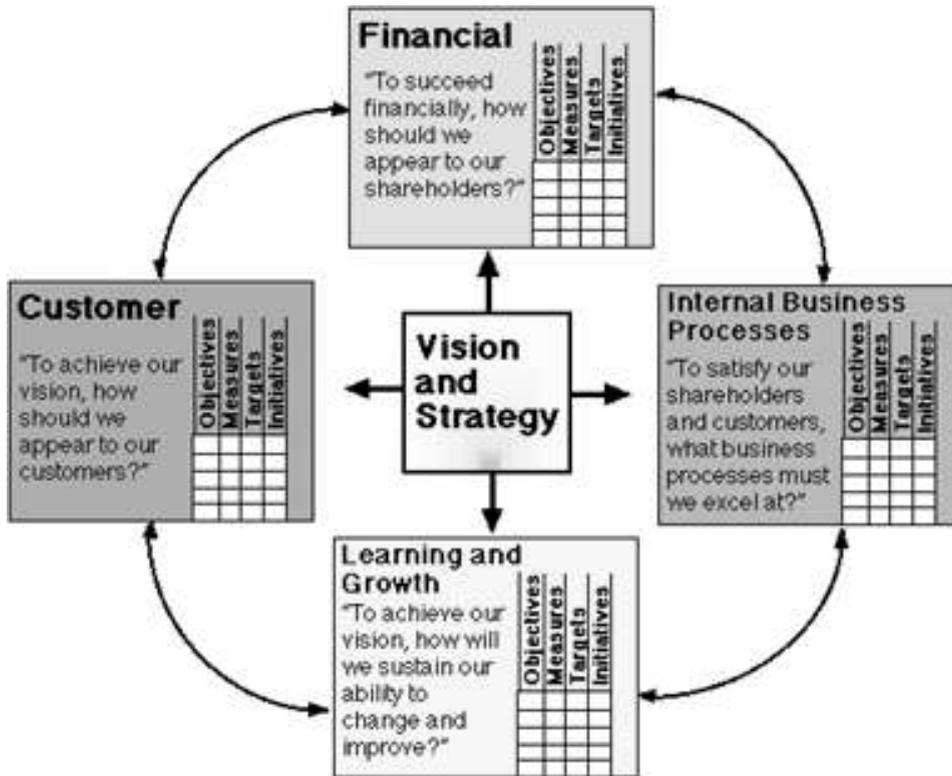


Figure 2 shows these perspectives in BSC.

Each of the four perspectives is considered by four parameters. Those parameters are:

- Goals (objectives): What do we need to achieve in that perspective to become successful?
- Measures: What parameters will we use to know if we are successful?
- Targets: What quantitative value will we use to determine success of the measure?
- Initiatives: What will we do to meet our goals?

The balanced scorecard minimizes information overload by limiting number of measures used, so managers must focus on the handful of measures that are most critical.

Kim et al. presented advantages of BSC that make it an excellent tool for evaluating CRM.

- BSC makes it possible to evaluate managerial activities with unbiased viewpoints by providing both tangible financial aspects and intangible, non-financial aspects.
- BSC evaluates customer satisfaction which is very important in e-business.
- BSC is a goal-oriented system. To evaluate CRM effectiveness in a consistent manner, a developer can consider the goals or objectives of CRM.
- BSC is an action-oriented system. It can monitor and improve business performance.

Using BSC to evaluate the effectiveness of CRM

While the BSC has proven to be a powerful management tool for measuring and managing overall corporate strategy, its implementation typically does not dig deeply enough into the drivers of CRM performance to be effective.

Some authors have established some variations adapting the variables to a CRM context. James Brewton-the president of CRM matrix firm see that an adding a few new measures like customer lifetime value (CLV) and customer retention to the BSC's customer perspective is still not enough to translate CRM strategy into the actions necessary for success. What's needed is a measurement system that focuses specifically on CRM (*CRM scorecard*).

The balanced scorecard needs modifications in three important areas:

- A scorecard should be established for each customer segment targeted for CRM.
- The process perspective should focus specifically on core CRM functions and processes, e.g., marketing, sales, and service.
- The scorecard should monitor performance for all customer contact channels.

So, the key perspectives of the CRM scorecard are:

Segment Perspective: focuses on the specific customer segments targeted for CRM and their value proposition. Targeted customer segments are those that the organization has determined will contribute the greatest to long-term profitability and deliver the biggest return on CRM investment. The most popular value proposition models are: product / service superiority, operational excellence and customer intimacy.

2. *Financial Perspective*: reflects the strategic CRM financial objectives for each targeted customer segment.

3. *Customer Perspective*: focuses on the strategic CRM customer success factors for achieving desired CRM financial outcomes.

4. *Operations Perspective*: focuses on the strategic CRM operational success factors for achieving desired customer outcomes for each CRM function (e.g., marketing, sales, customer service) and customer contact channel (e.g., inbound phone, outbound phone, e-mail, web).

5. *People / IT Perspective*: focuses on the strategic CRM people and technology success factors for achieving desired CRM operational and customer outcomes for each CRM function and customer contact channel.

James Brewton presents five key steps are required to implement a CRM scorecard:

Step 1) Define CRM Strategy: by creating the organization's CRM "Strategy Map": which is a graphic representation that clearly communicates the critical cause-and-effect relationships of the organization's unique CRM strategy.

Step2) Select Strategic CRM Measures: with the CRM Strategy Map completed, the next step is to select the measures that best indicate performance for each success factor outlined in the CRM Strategy Map. The number of measures depends upon an organization's unique CRM strategy, but the number of measures in a well-designed CRM scorecard will typically fall in the 15 to 25 measures range. The measures selected should be both necessary and sufficient to focus and drive strategic CRM performance. These strategic measures become the organization's strategic CRM scorecard. The final action for step 2 is to choose performance targets for each strategic CRM measure.

Step 3) Cascade Strategic CRM Measures: linking the measures in the CRM scorecard to department, team and individual employee performance measures. Successfully completing this step forges a strong link between daily decision-making and action by front-line managers, coaches and employees.

Step 4) Implement a CRM Performance Reporting Solution: with strategic measures in place, a reporting system is needed to keep enterprise managers at every level informed of the performance of each CRM measure and where improvement is needed. To be effective, a CRM performance reporting system must get the right information to the right people at the right time. Some vendors are now offering performance reporting solutions specifically targeted at strategic CRM performance measurement (e.g., Accrue, SPSS).

Step 5) Entrenching Strategic CRM Measurement: strategic measurement must become entrenched in the culture of the organization. Successful organizations integrate their strategic measurement system into the core management systems of their business. This includes tying strategic measures to: human resource systems (e.g., selection and hiring, learning and development, performance recognition and reward); Management systems (e.g., performance review, continuous improvement); and Finance systems (e.g., budgeting). That assesses the effectiveness of CRM .The steps of this process are:

- 1) Determining the mission and goal of CRM.
- 2) Establishing a CRM strategy to figure out the principle strategic factors.

3) Analyzing cause-and-effect relationship of the CRM process.

4) Deciding perspectives and metrics.

5) Analyzing the effectiveness to get evaluation result.

They changed the traditional four perspectives to reflect a customer-centric philosophy in CRM evaluation. The revised model consists of the following four perspectives (Injazz et al., 2002):

1) *Customer knowledge*: It focuses on understanding customer and analyzing customer information.

2) *Customer interaction*: It represents operational excellence and channel management of customer services and management processes.

3) *Customer value*: It represents the benefits gained from customers, such as lifetime value and customer loyalty.

4) *Customer satisfaction*: It represents the level of satisfaction achieved by products or services. Among the four perspectives, the customer satisfaction perspective is the most important because customer satisfaction is directly linked to a company's profits.

These four perspectives were identified by analyzing cause-and-effect relationships of the CRM process. Each perspective is evaluated by appropriate metrics selected according to the specific goals and objectives of a company.

In 2007, Hyung-Su Kim and Young-Gul Kim proposed a framework called CRM scorecard, which can diagnose and assess companies' CRM initiatives. The CRM scorecard was developed

Through comprehensive literature review and in-depth interviews with CRM practitioners, with specific objective and subjective instruments added to measure corporate CRM capability and readiness. The steps for building CRM scorecard are (Johnson et al., 2012):

Step 1: Building a Theoretical Causal Map

They classified the significant factors into one of the four different perspectives (infrastructure, process, customer, and organizational performance) drawn on the balanced scorecard. The success factors included in the infrastructure perspective are necessary conditions for efficient and effective CRM process; the CRM process leads to the customer perspective and finally the customer perspective makes a positive impact on organizational performance. Meanwhile, some academic researches have also shown the existence of direct relationships such as infrastructure to customer and process to organizational performance.

Step 2: Extracting Hierarchical Map for CRM Success from Practical Perspective

Though the conceptual structure of this model is very similar with the previous theoretical one, it reveals another factor called “explicit goal”.

Step 3: Integrate Theoretical and Practical Models

Step 4: Develop Measurement Instruments

They used validated survey items as subjective (qualitative) measures for each factor and KPIs (Key Performance Indicators) as objective (quantitative) measures. All the measures included in CRM scorecard are positioned impartially in four areas in the 2x2 matrix with two kinds of dimensions (i.e., subjective versus objective and antecedent versus subsequent).

Step 5: Prioritization of CRM Success Factors

They conducted an Analytic Hierarchy Process (AHP) analysis to prioritize the evaluation factors with a group of CRM experts. The results are:

- The infrastructure is the least important perspective among the four different perspectives.
- Explicit goal, expanding customer relationship, strengthening customer loyalty, and enhancing customer equity are the most important factors in infrastructure, CRM process, customer, and organizational performance perspective, respectively.
- IT became the least important factor in this study.

Also in 2007, Grabner-Kraeuter S. et al presented an integrated CRM performance evaluation framework (CRM-SEM -System for CRM-Excellence Measurement) for a systematic cost-benefit assessment and for on-going performance monitoring of CRM initiatives. It provides a multi-criteria, quantitative and qualitative approach towards an assessment of the return on CRM-related investments (Wov et al., 2012).

The main dimensions are:

- Creation of additional value for the company (e.g. contribution to ROI (Return on Investment), CFROI (Cash Flow Return on Investment)).
- Increase in customer value (e.g. increase in CLV, improvement of customer structure).
- Improvement of customer-centric processes (e.g. shorter Time to Delivery)
- Improvement in organizational and human resources (e.g. higher motivation, more incentives).

CRM-SEM framework integrates methods and instruments that are frequently used in strategic management accounting: Benchmarking, BSC and Simulation of Scenarios in order to provide different perspectives on CRM performance. Depending on the factors it can make sense to pay special attention to different performance metrics both to

evaluate whether or not CRM should be implemented and to assess on-going results of CRM initiatives (Ozgenre, 2006).

To be able to evaluate CRM initiatives within this framework a set of tools and techniques has to be applied in order to obtain the necessary information. The initial step is setting a basic model of metrics in the four dimensions of CRM-SEM. The secondly benchmarks has to be established to define the ranges and probabilities for the metrics. The third step is the simulation of various scenarios, and comparisons of various developments can be obtained.

1) Setting the basic model: The basic model consists of several metrics, which should - according to the BSC approach - measure the impact of different tasks to achieve the strategic goals of the enterprise:

- The financial perspective in CRM-SEM can be examined with traditional criteria like ROI, CFROI, etc.
- The customer value perspective should reflect the positive effects of CRM on retention, satisfaction, positive recommendation etc. which are expressed by higher payments and revenues from the customer.
- Metrics for the customer-centric processes perspective can consider the measurement of process-time, process-failure-rates, etc.
- The organizational perspective might include employee satisfaction, motivation measures, incentives etc.

2) Benchmarking: It is a core component of the proposed cost-benefit- assessment of CRM Systems The strengths and weaknesses of the company are related to the best conceivable product and service both to find out the necessary investment for each customer segment and the attainable Cash Flows that can be attained with different CRM initiatives (Wow, 2007).

3) Simulation of Scenarios: For evaluating the performance of CRM initiatives e.g. two scenarios can be analyzed. First scenario is a zero scenario, which means that no additional investment in customer relationship activities is done; the second scenario is one with CRM investment and activities (Madill et al., 2007).

3- Methodology

Since the purpose of this study is to describe situation and concepts for better explanation and better decisions, this study is considered to be descriptive study. And since required data were gathered from the sample, it is a field research.

In the other hand, regarding the type of the study, since the goals of this study is practical for managers, this study is considered to be practical research.

4- Findings

Since we had 25 critical success factors, in the next table these factors are ranked upward down.

Table1: factor weight of score cards and critical success factors

dimensions	title	weight for BSC dimensions	CSF weights	CSF final weights
customer	Attracting customer satisfaction	0.440	0.499	0.197
	Improvement of products' quality	0.44	0.231	0.102
	Improvement of loyalty	0.440	0.131	0.057
	Customer support in time	0.44	0.088	0.039
	Improvement of after sale services	0.44	0.05	0.022
Finance	Improvement of profit	0.271	0.43	0.128
	Improvement of sell efficiency	0.271	0.23	0.062
	Development of internal sell	0.271	0.14	0.038
	Development of external sell	0.271	0.12	0.032
	Creation of new revenue sources	0.271	0.08	0.022
Internal process	Presenting products with competitive prices	0.181	0.146	0.0264
	Improvement of quality control process	0.181	0.144	0.026
	Improvement of internal	0.181	0.134	0.024

	process			
	Identification of customers need	0.181	0.096	0.017
	Development of sell network	0.181	0.09	0.016
	Market segmentation	0.181	0.081	0.0146
	Identification of key customers	0.181	0.074	0.0134
	Creation of facilities for key customers	0.181	0.073	0.0132
	Attracting key customers	0.181	0.072	0.013
	Design and innovation	0.181	0.053	0.009
	Offering training services	0.181	0.047	0.0085
	Exclusive partnership with customers	0.181	0.022	0.004
Development and learning	Development of informational channels	0.0108	0.63	0.068
	Development of customer orientation	0.108	0.271	0.029
	Improvement of employees skills	0.108	0.099	0.108

Table 2: ranking of key factor based on their weight

title	Related aspect	rank	CSF weight
Attracting customer satisfaction	Customer	1	0.197
Improvement of profit	Finance	2	0.128
Improvement of products' quality	Customer	3	0.102
Development of informational channels	Development and learning	4	0.068
Improvement of sell efficiency	Finance	5	0.062
Improvement of loyalty	Customer	6	0.057
In time support	Customer	7	0.039

Development of internal sell	Finance	8	0.038
Development of external sell	Finance	9	0.032
Development of customer orientation	Development and learning	10	0.029
Presenting products with competitive prices	Internal process	11	0.0264
Improvement of quality control process	Internal process	12	0.026
Improvement of internal process	Internal process	13	0.024
Improvement of after sale services	customer	14	0.022
Creation of new revenue sources	finance	15	0.022
Identification of customers need	Internal process	16	0.017
Development of sell network	Internal process	17	0.016
Market segmentation	Internal process	18	0.014
Identification of key customers	Internal process	19	0.0134
Creation of facilities for key customers	Internal process	20	0.0132
Attracting key customers	Internal process	21	0.0130
Improvement of employees skills	Development and learning	22	0.011
Design and innovation	Internal process	۲۳	0.009
Offering training services	Internal process	۲۴	0.009
Exclusive partnership with customers	Internal process	۲۵	0.004

As it is shown in the table, among the critical success factors, attracting customer's satisfaction, improvement of profitability from customers and improvement of quality of products have the most importance among all factors. And three less important factors are: offering training services, improvement of internal process and in time offering of products.

5- Conclusion

According to internal and external studies, for implementing customer relationship management, three elements must be at place which are process, technology and people which were discussed in the text. Organizations need to find important and critical factors regarding successful implementation of system.

According to studies, one of the most important and influential factors for executing customer relationship management is knowledge management. It seems proper training of the staff, developing commitment among them, using expertise and planning well before implementation to be important factors in developing proper system in organization.

Recommendations

According to results of the study, below recommendations can be useful for management.

- Since the survival of the company is totally dependent to their customers we recommend to Semnan West Steel to properly concentrate on their customers' needs. One of the useful means in this regard is CRM cards. Therefore, we recommend managers to use these cards and set their proper strategy with emphasis to their customers' needs.
- We recommend to West steel corporation to pay attention to all of the key success factors. And more importantly for developing proper strategies, the prioritization of the factors are also important and worth to consider.
- Identifying key success factors in customer relationship management is the most important step. By use of estimated weights and prioritization of them according to their importance, proper solutions for developing strategy could be offered.
- We recommend to West Steel managers to develop a customer data center to store customer information and use them at the proper time
- By using proper data centers and storing customers' information West Steel can identify its key customers and with identifying important needs of these customers, mangers could gain valuable and strategic information about their key customers.

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