CRM Scorecard - CRM Performance Measurement

Arwa M. Al-Safi, Lilac Al-Safadi, Abdullah Al-Mudimigh
College of Computer and Information Sciences, King Saud University
arwa_mas@yahoo.com, lalsafadi@ksu.edu.sa, mudimigh@ksu.edu.sa

Abstract

Customer Relationship Management (CRM) is a strategy implemented for managing a company’s interactions with customers, clients and sales prospects. Companies have invested or planning to invest huge amounts to implement CRM strategies, tools and infrastructure in order to attract and retain profitable customers in today’s increasingly competitive markets. For that, they are recommended to have a measurement system to manage and assess the effectiveness of CRM initiatives. One of the effective performance measurement methods is the Balanced Scorecard (BSC). The purpose of this paper is to identify the variations made on BSC to become suitable to measure the performance of CRM. Then, we propose a CRM scorecard to evaluate the performance of CRM systems based on the literature review and the practice of a major bank in Saudi Arabia.

Keywords: Customer Relationship Management (CRM), Balanced Scorecard (BSC), Performance Measurement

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 [1]. Implementing CRM usually requires large investments not only in technology, but also in labor 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 [2]. 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".

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.

1.1. Problem Definition

Despite the benefits of CRM, however, the road to CRM success may be more difficult. Analysts and consulting firms have reported staggering estimates of CRM initiative failures [3]:

- Gartner research shows that more than half of all CRM projects don’t produce results, and that 50% of CRM strategies will still fail.
- Cap Gemini Ernst & Young reports that 70% of CRM initiatives fail.
- Peppers & Rogers Group, which focuses on the benefits of one-to-one marketing, estimates that 80% of CRM projects fail to generate a positive return.

Therefore, the companies need a way to reduce CRM strategy execution failure and to maximize CRM performance. One of the effective ways is performance measurement using the balanced scorecard approach.
1.2. Objectives

The objectives of this research are:
- Identifying the variations made on BSC to become suitable to measure the performance of CRM.
- Studying how a local bank measures the CRM performance.
- Proposing a CRM scorecard to measure the effectiveness of CRM.

1.3. Research Methodology

This research has been based on desk research and field research. Because the BSC provides the most integrative approach for measuring business performance, the desk research was made by reviewing the literature on using BSC to evaluate the effectiveness of CRM systems. These literatures are used as a basis to formulate our proposed CRM scorecard. The field research involved interviewing key employees in a major local bank to identify the measures used to evaluate the performance of CRM and then, come up with our proposed CRM scorecard. Also, the additional information was supported through emailed questions and answers. To protect the privacy of the participating bank, an alias name is given to the bank all throughout the paper, that is “X bank”.

The remainder of this paper is organized as follows: Section 2 presents related work in CRM Scorecards; Section 3 proposes the CRM scorecard; and Section 4 offers conclusions and recommendations.

2. Literature Review and Related Works

CRM is a strategy used to learn more about customers' needs and behaviors in order to develop stronger relationships with them [4]. 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 [3]. However, CRM is not just a technology but rather a comprehensive, customer-centric approach to an organization's philosophy of dealing with its customers [5]. Some potential benefits of CRM are as follows [6]:
- 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.

2.1. CRM Architecture

According to the Meta group, CRM systems can be classified into the following three sub-categories [7]:
- **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 centers.
- **Analytical CRM systems** store and evaluate knowledge about customers for a better understanding of each customer and his behavior. 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. 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 [8]. Therefore, the architecture of a general CRM system is proposed in [9] and it is comprised of these three subsystems, figure 1 shows the architecture of the general CRM system.

![Architecture of the general CRM system](image)

**Figure 1. Architecture of the general CRM system**

### 2.2. 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 [10]. 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 [11]. BSC allows managers to look at the business from four different perspectives:

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 [12]:

- 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 [11].

Kim et al. [6] 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.

2.3. 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 [13].

Some authors have established some variations adapting the variables to a CRM context. James Brewton-the president of CRMetrix firm-[14] 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 [13]:

- 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:
1. **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.

- **Step 2) 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). Figure 3 provides an example of a CRM scorecard.
Another model was presented by Kim, Suh, and Hwang in 2003 [6]; which is the iterative process 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:

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. Table 1 shows the measures of each perspective:

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**Table 1: CRM Scorecard - CRM Performance Measurement**

<table>
<thead>
<tr>
<th>CRM Scorecard Perspective</th>
<th>CRM Success Factors (What must be accomplished for each perspective)</th>
<th>Strategic CRM Measures (Indicators of performance for each success factor)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial</strong></td>
<td>• Maximize Customer Lifetime Value (CLV)</td>
<td>• Customer Lifetime Value ($)</td>
</tr>
<tr>
<td></td>
<td>• Maximize Share-of-Wallet</td>
<td>• Share-of-Wallet (%)</td>
</tr>
<tr>
<td><strong>Customer</strong></td>
<td>• Maximize Retention</td>
<td>• Retention Percent (%)</td>
</tr>
<tr>
<td></td>
<td>• Maximize Penetration</td>
<td>• Penetration Ratio (%)</td>
</tr>
<tr>
<td></td>
<td>• Maximize Win Backs</td>
<td>• Win Back Percent (%)</td>
</tr>
<tr>
<td></td>
<td>• Maximize New Business</td>
<td>• Customer Acquisitions (#)</td>
</tr>
<tr>
<td></td>
<td>• Maximize Satisfaction</td>
<td>• Customers Highly Satisfied (%)</td>
</tr>
<tr>
<td><strong>Operations Marketing</strong></td>
<td>• Maximize Marketing Effectiveness</td>
<td>• Number of Leads per Marketing Channel (#)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cost per Lead per Marketing Channel ($)</td>
</tr>
<tr>
<td><strong>Operations Sales</strong></td>
<td>• Maximize Sales Productivity</td>
<td>• Conversion Rate per Sales Channel (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Revenue per Conversion per Sales Channel ($)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cost of Sales per Sales Channel ($)</td>
</tr>
<tr>
<td><strong>Operations Service</strong></td>
<td>• Maximize Service Quality</td>
<td>• Service Level per Service Channel (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cost per Service Encounter per Service Channel ($)</td>
</tr>
<tr>
<td><strong>People / IT</strong></td>
<td>• Increase Satisfaction</td>
<td>• CRM Employees Highly Satisfied (%)</td>
</tr>
<tr>
<td></td>
<td>• Increase Strategic Competencies</td>
<td>• CRM Core Competency Coverage by CRM Function (%)</td>
</tr>
<tr>
<td></td>
<td>• Increase Strategic Knowledge</td>
<td>• CRM Employees Trained in Strategic Six Sigma (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strategic CRM Information Accessibility Ratio by CRM Function (%)</td>
</tr>
</tbody>
</table>
Table 1. Measures to evaluate CRM performance

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Measures</th>
</tr>
</thead>
</table>
| **Customer Knowledge** | Customer acquisitions (No.)  
                        | Number of customers (No.)  
                        | Page views per day (No.)  
                        | Visits per day (No.)  
                        | Net sales/employee (%)  
                        | R&D investment ($)  
                        | Customer profile research ($)  
                        | Security level (%)  |
| **Customer interaction** | Marketing campaign (No.)  
                        | Total cost for promotion ($)  
                        | Frequency of contents update (No.)  
                        | Number of payment methods (No.)  
                        | Number of response channel to customer inquiry (No.)  
                        | Total cost for managing channel ($)  
                        | Avg. delivery time after order fulfillment (No.)  
                        | Response time to customer inquiry (No.)  
                        | Transaction conducted by members (%)  
                        | Product diversity  
                        | Detailed product information  
                        | Timeliness sales in popular product  |
| **Customer value** | Number of retained customers (No.)  
                        | Net sales ($)  
                        | Ordinary sales ($)  
                        | Asset/employee ($)  
                        | Profit/employee ($)  
                        | Channel interface  
                        | • Usability  
                        | • Attractiveness  
                        | • Navigation efficiency  
                        | • Contents search  
                        | • Consistency of site structure  |
| **Customer satisfaction** | Brand image (%)  
                        | Service level (%) (response to customer inquiry)  
                        | Number of daily customer inquiries (No.)  
                        | Customer satisfaction (%)  
                        | • Assurance  
                        | • Reliability  
                        | • Empathy  
                        | • Responsiveness  
                        | • Tangibles  |

In 2007, Hyung-Su Kim and Young-Gul Kim [15] 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:

**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.

Table 2 shows the overview of the CRM scorecard.
Table 2. CRM Scorecard

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Diagnostic Factors</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational Performance</strong></td>
<td>Shareholder Value</td>
<td>Subjective: SHV (Shareholder value)</td>
</tr>
<tr>
<td></td>
<td>Profitability</td>
<td>Objective: ROA (Return On Assets), ROI (Return On Investment), Net sales/employee</td>
</tr>
<tr>
<td></td>
<td>Customer Equity</td>
<td>Subjective: Customer Equity, CLV (Customer Lifetime Value), Profit/customer</td>
</tr>
<tr>
<td><strong>Customer</strong></td>
<td>Customer Loyalty</td>
<td>Perceived Loyalty: RFM (Recency Frequency Monetary value)</td>
</tr>
<tr>
<td></td>
<td>Customer Satisfaction</td>
<td>Perceived Customer Satisfaction: Satisfied Customer Ratio (%)</td>
</tr>
<tr>
<td></td>
<td>Customer Value</td>
<td>Perceived Value, Brand Equity, Relationship: Customer Complaints(#)</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>Customer Acquisition</td>
<td>Readiness for Acquisition Process: Leads per channel, Acquisition(#), Visits of web(#), Win-back(%)</td>
</tr>
<tr>
<td></td>
<td>Customer Retention</td>
<td>Readiness for Retention Process: Response time (Wait time), complaints resolved on 1st call(%)</td>
</tr>
<tr>
<td></td>
<td>Customer Expansion</td>
<td>Readiness for Expansion Process: Share of Wallet(%), Core Customer Ratio(%)</td>
</tr>
<tr>
<td><strong>Human Capital</strong></td>
<td>Employee Behavior</td>
<td>Customer Oriented Attitude: Human capital readiness(%), Timer per Job, Calls handled per call center staff (Sales rep coverage)</td>
</tr>
<tr>
<td></td>
<td>Employee Satisfaction</td>
<td>3 Justices for Emp. Satisfaction: Key employee turnover</td>
</tr>
<tr>
<td></td>
<td>Management Attitude</td>
<td>Perception &amp; Support for CRM:</td>
</tr>
<tr>
<td><strong>Strategic Alignment</strong></td>
<td>Training</td>
<td>Training Procedure: Training day/ Employee</td>
</tr>
<tr>
<td></td>
<td>Reward System</td>
<td>Appropriateness of Reward system:</td>
</tr>
<tr>
<td></td>
<td>Organizational Structure</td>
<td>Organizational Flexibility: Improvement in diversity profile</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>Partnership</td>
<td>Coordinating effort: Vendor Diversity:</td>
</tr>
<tr>
<td></td>
<td>Market Orientation</td>
<td>Market Orientation: Frequency of Customer survey, Customer Knowledge</td>
</tr>
</tbody>
</table>
Also in 2007, Grabner-Kraeuter S. et al. [2] presented an integrated CRM performance evaluation framework (CRM-SEM - System for CRM-Excellence Measurement) for a systematic cost-benefit-assessment and for ongoing performance monitoring of CRM initiatives. It provides a multi-criteria, quantitative and qualitative approach towards an assessment of the return on CRM-related investments. Figure 4 shows the main dimensions of CRM-SEM framework:

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 ongoing results of CRM initiatives.

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.

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.

2.4. Case Study

In this section, the CRM practice in a major bank (X bank) in Saudi Arabia will be presented to study how it measures the performance of CRM system.

X bank had implemented Oracle CRM system since 2004 and its work focuses on an operational CRM which comprise Service Models, Sales Applications (Sales on Line) and Marketing. The bank identified a number of critical success factors for effective CRM, including: profitability, customer satisfaction, customer loyalty, rapid response to requirements and complaints of customers and employee capability.

To evaluate the CRM performance, X bank does not use a BSC as a measurement system. But, it uses some measures which can be classified in different perspectives as represented in table 3.

<table>
<thead>
<tr>
<th>Table 3. Measures used by X bank</th>
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</thead>
<tbody>
<tr>
<td><strong>Perspective</strong></td>
</tr>
<tr>
<td>Financial</td>
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<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Customer</td>
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<tr>
<td>Process</td>
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</tbody>
</table>

These measures have been mentioned in the literature review; customer satisfaction and the net sales in [2, 6, 14, and 15], SHV and the time to resolve complaints in [2, 6, and 15] and ROI in [2, 14, and 15]. X bank does not consider the innovation and learning perspective in evaluating CRM. For that, we suggest using additional measures like training day/ employee, human capital readiness and employees highly satisfied, etc.

The bank conducts these measurements quarterly to help influence specific decision making process about how to manage customer relationships.

3. Proposed CRM Scorecard

We formulate the proposed CRM scorecard based on [15] since their scorecard was developed from the theoretical and practical perspectives. Also, it contained several subjective (qualitative) measures. Then, we complement it with additional important measures from [2, 14]. The scorecard proposed by Kim et al. [6] does not provide sufficient perspectives enough to explain CRM success. For that, we do not consider it sufficient for measuring the performance of the CRM. Also, this scorecard includes the measures used by X bank.

Table 4 shows the overview of the proposed CRM scorecard to evaluate the effectiveness of CRM system. It was developed through a comprehensive literature review and the result of the field research of local practices.

4. Conclusion and Recommendations

The following recommendations are useful for measuring the performance of CRM systems:

- The organizations should define their CRM strategy to determine the objectives of CRM systems.
- The selected CRM measures must reflect the performance according to the defined objectives.
- These measures must incorporate both financial and non-financial metrics, and give the adequate importance to human relationships and intangible assets.
- Ensure that the chosen measures are both necessary and sufficient. Generally no more than two measures per objective.
Remember that CRM is not just a technology, it is a strategic solution.

Despite the benefits of CRM, many CRM initiatives fail. For that a measurement system to manage and assess the effectiveness of CRM initiatives is needed. The BSC has proven to be a powerful measurement system. In this study, we presented how some authors have used BSC to become suitable to measure the performance of CRM. James Brewton see that the process perspective should focus specifically on core CRM functions and processes, e.g., marketing, sales, and service. Kim et al. restrict the innovation and learning perspective to only customer knowledge perspective, which is not sufficient to implement CRM effectively and efficiently. Hyung-Su Kim and Young-Gul Kim integrated various academic approaches related to CRM into a comprehensive framework. Especially, they derived several qualitative and antecedent factors that are important but have been ignored in the prior literature or practice and loaded them into the CRM scorecard as diagnostic factors. Finally, Grabner-Kraeutera et al. used BSC with other methods and instruments that are frequently used in strategic management accounting. These are Benchmarking and Simulation of Scenarios to determine and measure the effectiveness and efficiency of CRM projects. Also, in this study, we propose a CRM scorecard based on the literature review and practice of a local bank.
Table 4. Proposed CRM Scorecard

<table>
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</tr>
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<td>Profitability</td>
<td>Perceptual Performance</td>
<td>ROA (Return On Assets), ROI (Return On Investment), Net sales($), Net sales/employee</td>
<td>Customer Equity , CLV, Profit/customer</td>
</tr>
<tr>
<td>Customer Equity</td>
<td></td>
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<tr>
<td><strong>Customer</strong></td>
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<td></td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>Perceived Loyalty</td>
<td>RFM (Recency Frequency Monetary value)</td>
<td>Satisfied Customer Ratio (%)</td>
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<tr>
<td>Customer Satisfaction</td>
<td>Perceived Customer Satisfaction</td>
<td></td>
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<tr>
<td><strong>Customer Value</strong></td>
<td>Perceived Value, Brand Equity, Relationship</td>
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| Process                      | Customer Acquisition | Readiness for Acquisition Process | Number of Leads per Marketing Channel (#), Cost per Lead per Marketing Channel ($), Acquisition (#), Visits of web (#), Win-back (%), Profitability of new Customer, Response Rate, Conversion Rate per Sales Channel (%), Revenue per Conversion per Sales Channel ($), Cost of Sales per Sales Channel ($), Customer Contact Rate, Service Level per Service Channel (%), Cost per Service Encounter per Service Channel ($) |
|------------------------------| Customer Retention    | Readiness for Retention Process   | Response time (Wait time), complaints resolved on first call (%), Retention rate (%), Delivery time, Customer Churn rate, Reject rate by delivery, Trouble tickets cleared. |
| **Customer Expansion**       | Customer Expansion    | Readiness for Expansion Process   | Share Of Wallet(%), Core Customer Ratio(%), Cross/Up-Sell Rate, Value per Order |

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<tr>
<td>Human Capital</td>
<td>Employee Behavior</td>
<td>Customer Oriented Attitude of Employee</td>
<td>Human capital readiness(%), Timer per Job, Calls handled per call center staff (Sales rep coverage)</td>
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<tr>
<td>Human Capital</td>
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<td>Perception &amp; Support for CRM</td>
<td>Employees highly satisfied (%), Employees highly likely to stay (%)</td>
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<td>Strategic Alignment</td>
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<td>Training Procedure</td>
<td>Training day/ Employee</td>
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<td>Organizational Structure</td>
<td>Organizational Flexibility</td>
<td>Improvement in diversity profile</td>
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<td>Culture</td>
<td>Partnership</td>
<td>Coordinating effort</td>
<td>Vendor Diversity</td>
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<td>Market Orientation</td>
<td>Market Orientation</td>
<td>Frequency of Customer survey, Customer Knowledge Creation(#)</td>
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<td>Explicit Goal</td>
<td>Explicitness of Goal</td>
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5. References


