Performance Measuring Analysis of Customer Relationship Management MyXL Using CRM-Scorecard

Hidayah SYAFITRI¹, Ali IBRAHIM²*

¹hidayah@gmail.com, Information Systems Faculty of Computer Science, Universitas Sriwijaya, Indonesia
²alilibrahim@unsri.ac.id, Information Systems Faculty of Computer Science, Universitas Sriwijaya, Indonesia
*Corresponding Author : alilibrahim@unsri.ac.id

ABSTRACT
The company is aware of the customers’ needs which are not fulfilled, and of its CRM’s work effectiveness (MyXL Application). This research aims at analysing and determining MyXL app’s work, and giving solution to develop the programs or attributes which are not yet working well for the next period. Analysing CRM-scorecard work measure starts from translating the company’s vision, mission, and business strategy to the vision, mission, and business strategy of MyXL based on the four perspective of CRM-scorecard, setting the strategic aim, creating strategy map, setting the target and strategy initiative and to measure each perspective’s strategic aim by using pairwise comparison. The result of counting the works of all perspective is 3,46 where from the customer value perspective has 1, customer satisfaction 0,78, customer interaction 0,75, and customer knowledge 0,94. Therefore, this result can be used as an evaluation for the company, especially to the customer interaction perspective.

Keywords: ServQual, CRM, CRM-scorecard, strategy map, pairwise comparisons

INTRODUCTION
PT. Berkah Karunia Kreasi (XL dealer) is one of the companies dealers operator telecommunication in South Sumatra. PT. Berkah Karunia Kreasi (XL dealer) is one dealer's PT. XL Axiata located Indonesia. PT. Berkah Karunia Kreasi (XL dealer) is also increasingly aware of the importance, so it is needed to raise the customer’s satisfaction services thus the customers remain loyal on using XL card and axis. To enhance customer satisfaction to remain using XL & Axis card, PT. Berkah Karunia Kreasi (XL dealer) applies the program customer relationship management on application MyXL to maintain a good relationship with the customer. Although the number of customers has increased in recent months, but not as much as expected. Not to mention the number of customer migration is still fluctuating. Therefore, PT. Berkah Karunia Kreasi (XL dealers) still need to increase the number of subscribers and decrease the number of customer migration and complaints customers. PT. Berkah Karunia Kreasi (XL dealers) still need to increase the number of subscribers and decrease the number of customer migration and complaints customers. (XL dealer) has MyXL application that includes applying for a CRM program, but it is still unknown how much of the effectiveness of the performance of the CRM program, then needs to be done CRM count's performance measurement program that could affect customer satisfaction. With the known CRM application performance score MyXL can improve the effectiveness of CRM primarily for the score is still low. The purpose of this study is to get the results of performance measurement analysis of Customer Relationship Management so that it can be used as a solution to optimize customer service after the results of the performance measurements are known. Knowing the results of performance measurement of Customer Relationship Management using the method used. Knowing whether the CRM Scorecard perspective affects the company's strategy that has been implemented has achieved the intended target and provided feedback for the company.

LITERATURE REVIEW
Customer Relationship Management
According to O'Brien (2002: 131) CRM allows playing realtime customization and personalization on products and services by the wants, needs, custom purchases and the life cycle of the customer. CRM too watching data pills every time To do contact with the company. CRM enables the company to provide consistent and excellent service to all contacts that customers want so customers get a pleasant experience. All these advantages provide
a strategic business score for the company at once perceived value for the customer.
In concept, Customer Relationship Management (CRM), is a business strategy that consists of software and services that are designed to increase revenue and customer satisfaction. Increase profits, income, and customer satisfaction by helping companies to customize identification, upgrade the number of customers with faster and maintain customer loyalty.
According to Costanzo (2003: 8), CRM refers to a software system that helps companies obtain and download customer data and conduct two-way relationships. But time The CRM emphasizes more on policies and procedures designed to build sales and customer retention in various line companies.

**CRM-SCORECARD**

CRM Scorecard is a measurement system that specifically deals with CRM strategy and customer profitability objectives through five perspectives, namely the perspective of Customer Segmentation, Customer Value, Customer Satisfaction, Customer Interaction, and Customer Knowledge.

CRM strategy requires a measure of performance to determine whether the strategy has been implemented properly. CRM strategy often fails because of the size used is not appropriate. Therefore, what is needed is a measurement system that links the CRM strategy with the goal of profitability customers to measure what drives the performance of CRM within the organization, which is a CRM Scorecard.

The implementation of a CRM strategy should be followed by measuring the performance of the implementation of the strategy. Model balanced scorecard initiated Kaplan and Norton (1992, 1997, 2001) is a model of a performance measurement system that is comprehensive, balanced and illustrates the linkages between strategic objectives. This model has been developed for measuring performance in the implementation of the strategy functional like Human Resources Scorecard, Workforce Scorecard, Information Technology Scorecard, Kim, Suh and Hwang (2003) proposed four perspectives to evaluate CRM by modifying the perspective of the balanced scorecard (BSC). Four perspectives in CRM Scorecard are:

1. **Customer Value**
   Customer value leads to tangible and intangible advantages (tangible and intangible benefits) obtained from CRM activities. The Customer value perspective continues to look for ways to build commitment and customer loyalty.

2. **Customer Satisfaction**
   Customer satisfaction featuring a modern approach to quality within the organization, and presents the development of management and culture that really focus on the customer.

3. **Customer Interaction**
   Customer relations can be strengthened through effective interaction with customers.

4. **Customer Knowledge**
   Customer knowledge displays the status of the consumer and customer data management. Customer knowledge focus on the development technology, understand the needs of consumers, and consumer profiles, which affects the way consumers interact with.

This method establishes a strategy by way of formulating the vision, mission, and objectives of CRM, the next step is to find the relationship between CRM activity by analyzing which will be described in the following picture:

![CRM Evaluation Model](image-url)
The CRM evaluation model is an interactive process in measuring CRM performance. As seen in Figure 2.1, the first step in this process is to establish the mission and goals of CRM by lowering the vision, mission and business strategy into the four perspectives of the CRM Scorecard. Next is developing a CRM strategy. The purpose of this step is to find several factors for the right strategy. The next step is to find the relationship between CRM activities and business goals (the business goal is to increase profits). By analyzing these relationships, we can learn about what needs to be done to get better results and what perspectives are important to achieving those results. The causal relationship obtained can give clues to what perspective can be used to achieve business goals, by changing the perspective of the balanced scorecard into the perspective of the CRM scorecard.

SERVQUAL(Service Quality)

The ServQual (Service Quality) model was developed by Parasuraman, Zeithmal, and Berry. This model is commonly called the Gap Analysis Model which explains customer satisfaction in consuming or using a service. This model confirms that if the performance of an attribute (attribute performance) increases greater than expectations (expectations), then the perception of service quality will be positive and vice versa. The fundamental objective of developing the Service Quality model is to assist managers in analyzing the source of quality problems and understanding ways to improve service quality. ServQual Model is based on the assumption that the consumer comparing the performance of services on attributes relevant to the ideal standard for each of the service attributes. If they match or exceed the performance standards, then the perception of positive overall service quality and vice versa. ServQual Model is very appropriately used to analyze the gap between the two principal variables namely the expected services (expected service), and Service received (Perceived service). Measuring the quality of services in this model is based on a multi-item scale designed to measure expectations or services received, and the gap between them in the five main dimensions of quality of service (reliability, responsiveness, assurance, empathy, and tangibles).

a. Reliability variable
Reliability is the ability of the ministry in application MyXL or services Customer service on PT. Berkah Karunia Kreasi keep what has been offered both on the system and the procedure can be clearly understood by the customer. Variables reliability includes three indicators, namely application capabilities to deliver services, application capabilities provide services needed by the customer and application capabilities to rejuvenate subscribers.

b. Responsiveness Variable
Responsiveness is the ease of application to provide service with a response. Variable responsiveness consists of two indicators, ie the readiness to respond to customer demand and the convenient branch to use the application.

c. Assurance Variable
Assurance is the knowledge, ability, and friendliness of application in creating an opinion to be believed reflected by the trust customer to application security, a sense of security during the registration, and ease of use of the application.

d. Empathy Variable
The variables of concern are the care and attention of the company to customer complaints which is reflected in the attention of employees toward customer complaints. Variable empathy consists of two indicators of attention treat employees to a complaint are given customers and understanding of customer needs.

e. Tangible Variable
A variable physical form is a form of physical appearance. Variable appearance form consists of three indicators, which include layout tools in the application, interface on the application, and physical facilities shown on the application.

RESEARCH METHODOLOGY

Research intern used the survey method to measure the level of customer satisfaction and continued to make performance measurement tools CRM CRM Scorecard based model incorporating weighting on each of the strategic objectives, measurement values of performance using a measuring instrument designed with the objective data and the value of customer satisfaction obtained from the results of an online questionnaire. Proposed improvements score measurement results obtained from the performance of each strategic goal each perspective and the low level must be improved and proposals for the level of customer satisfaction obtained from the analysis Importance-Performance Matrix, The data in this study collected to analyze Importance-Performance Matrix using questionnaires customer satisfaction level of interest and are designed based on the variables in the method ServQual are distributed randomly with online questionnaires to 111 respondents who use XL card and Axis. The stages CRM-Scorecard design models are as follows:

1. Translate the vision, mission, and business strategy of the company into the vision, mission and business strategy MyXL application using the CRM-Scorecard perspective.
2. Establish strategic objectives
3. Build a strategy map.
4. Determining to specify benchmarks, targets, initiatives, the scale of ratings
5. Weighting and normalization using pairwise comparisons,
6. CRM performance measurement

Especially to the strategic objectives customer satisfaction in perspective customer satisfaction, the

RESULTS AND DISCUSSION

1. Vision

Being a service provider selected information and communication technology, both for customers individuals and businesses.

2. Mission

Provide the best for its customers, both in terms of products, services, technology, and value for money embodied by values such as Integrity, Cooperation, and PePrima service.

3. Business Strategy PT. Blessings
Gift of Creation

a. Availability
b. Visibility
c. Advocacy

4. The purpose of CRM Strategy is based on the results of the

Table 1 Prescribing Benchmarks, Targets, and Strategic Initiatives

| Perspective            | The Strategic Objective                   | Benchmark                                      | Target                        | Initiative                                      |
|------------------------|------------------------------------------|-----------------------------------------------|-------------------------------|------------------------------------------------|
| Customer Value         | Increasing the number of subscribers     | Percentage increase in the number of new customers | An increase of 5%             | • Improving service to customers
                                                                      |                                               |                                | • Improving good promotion activities notably in social or official website xl |
| Customer Satisfaction  | Improved quality of service              | The decline in the number of complaints        | a decline of up to 5%        | • Provide good service, fast and impressive.    |
|                        | Increased customer                       | The percentage of customer                     | Increase customer             | • Understanding the needs of customers          |
| Customer Interaction | Customer Knowledge | Development of product packages on application |
|----------------------|--------------------|-----------------------------------------------|
| Improving product innovation & service | The effectiveness of marketing strategy | Number of package innovation is proud |
| Satisfaction (Results of the questionnaire) | The number of new products & services | Percentage of customer desires and market developments |
| Issued 5 new products or services per period | The effectiveness of the cost of marketing and sales to increase customer | Conducting the survey as many as 3 months |
| Make a product of interest for each customer | | Conduct surveys and periodic evaluation of the data the customer's wishes |
| | | Always combine packages that attract customers |

### 6. Scaling Assessment

In the strategic business goals of performance measurement every perspective, the scale is a scale of measurement used likeart 1 - 5. Where the determination of the scale seen from a comparison with the results of the current targets. Here's a table rating scale:
### Table 2 Determination of Value Benchmarking Strategic Goals

| The Strategic Objective | Target | Result | Assessment                                                                 | Score |
|-------------------------|--------|--------|------------------------------------------------------------------------------|-------|
|                         |        |        | **Customer Value**                                                          |       |
| Increasing the number of new customers | Getting new customers 10% more than the previous | 5:58% | Number of new customers ≥10%                                                 | 5     |
|                         |        |        | 7.5% < the number of new customers ≤10%                                     | 4     |
|                         |        |        | 5% < number of new customers ≤7.5%                                          | 3     |
|                         |        |        | 2.5% < number of new customers ≤5%                                          | 2     |
|                         |        |        | the number of new customers ≤2.5%                                          | 1     |
|                         |        |        | **Customer Satisfaction**                                                   |       |
| Improved quality of service | The decline in the number of complaints of the 5% | 2:38% | The decline in the number of complaints of ≥5%                               | 5     |
|                         |        |        | 4.5% < decrease in the number of complaints of ≤5%                          | 4     |
|                         |        |        | 3.5% < The decline in the number of complaints of ≤4.5%                     | 3     |
|                         |        |        | 2.5% < The decline in the number of complaints of ≤3.5%                     | 2     |
|                         |        |        | The decline in the number of complaints of ≤2.5%                           | 1     |
| Increased customer satisfaction | Average rate customer satisfaction reached 4.5 | 3.93 | The level of customer satisfaction ≥4.5                                     | 5     |
|                         |        |        | 3.5 < customer satisfaction ≤4.5                                            | 4     |
|                         |        |        | 2.5 < The decline in the number of complaints of ≤3.5                       | 3     |
|                         |        |        | 1.5 < The decline in the number of complaints of ≤2.5                       | 2     |
|                         |        |        | The decline in the number of complaints of ≤1.5%                           | 1     |
| Improved product innovation & service | 5 issued a number of new products or services | 4 | Issue new products ≥6                                                        | 5     |
|                         |        |        | 4 < issue new products ≤6                                                   | 4     |
|                         |        |        | 2 < The decline in the number of complaints of ≤4                            | 3     |
|                         |        |        | Issue new products ≤2                                                       | 2     |
|                         |        |        | Not issue new products                                                      | 1     |

**Customer Interaction**
| The strategic objective | Target                                                                 | Result | Assessment                                                                 | Score |
|-------------------------|------------------------------------------------------------------------|--------|---------------------------------------------------------------------------|-------|
| The effectiveness of marketing strategy | Effectiveness among the marketing costs & increase sales with customers in the ratio 0.65 | 0.37   | Comparison of the cost of marketing & sales $\geq 0.65$                   | 5     |
|                         |                                                                       |        | $0.45 < \text{Comparison of the cost of marketing & sales} \leq 0.65$       | 4     |
|                         |                                                                       |        | $0.35 < \text{Comparison of the cost of marketing & sales} \leq 0.50$       | 3     |
|                         |                                                                       |        | $0.25 < \text{Comparison of the cost of marketing & sales} \leq 0.45$       | 2     |
|                         |                                                                       |        | $\text{Comparison of the cost of marketing & sales} \leq 0.25$             | 1     |
| The development of events with customers | The number of activities held seven events per period | 4      | The number of activities held at $\geq 7$                                | 5     |
|                         |                                                                       |        | 5 $<\text{Number of activities held} \leq 7$                              | 4     |
|                         |                                                                       |        | 3 $<\text{The number of activities held} \leq 5$                          | 3     |
|                         |                                                                       |        | 1 $<\text{The number of activities held} \leq 3$                          | 2     |
|                         |                                                                       |        | The number of activities held at $\leq 1$                                 | 1     |

### Customer Knowledge

| The strategic objective | Target                                                                 | Result | Assessment                                                                                                                                                                                                 | Score |
|-------------------------|------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| System updates customer security technology | Performance level system customer security technology and combination data warehouse and run very well datamining | Goes well | Performance level system of customer security technology and the combination of data warehousing and data mining runs very well                                                                            | 5     |
|                         |                                                                       |        | Performance level system customer security technology and the combination of data warehousing and data mining goes well                                                                               | 4     |
|                         |                                                                       |        | Performance level system customer security technology and the combination of data warehousing and data mining went well                                                                                | 3     |
|                         |                                                                       |        | Performance level system customer security technology and the combination of data warehousing and running with good data mining                                                                            | 2     |
|                         |                                                                       |        | Performance level system customer security technology and the combination of data warehousing and data mining run is not very good                                                                              | 1     |
Increased understanding of customer needs

| Perspective | Strategic Goals | Criteria | Weight |
|-------------|----------------|---------|--------|
| Customer Value | Increasing the number of new customers | • Improve customer satisfaction  • Improve customer satisfaction  • Increase sales | 1 |
| Customer Satisfaction | Improved quality of service | • Performing employees | 0:22 |
| | Increased satisfaction customer | • Good service  • Prompt response | 0:33 |
| | Improved product innovation & service | • Conduct training | 0:45 |
| Customer | The effectiveness of marketing | • Promotional activities | 0.84 |

7. **Weighting And Weight Normalization**

In the calculation of weighting and normalization of weight for each destination strategy used method pairwise comparisons. Wherein the first step on this weighting is to determine the criteria for each destination perspective, then make pairwise comparisons judgment matrix and then calculate the value of the eigenvector for each matrix, and counting consistency ratio. Where the assessment results are acceptable if CR ≤ 0.1. Following the results, table weighting has been normalized.

**Table 3** Determination of Weight Values Strategic Goals
8. **CRM Performance Value Calculation**

### Each Perspective

Performance measurement is done by way of assessment scores multiplied by the weighting score, where a score of votes is obtained from the calculation of the performance of each perspective to the scale, and the weight is obtained from the weighting that has normalized. Below is a calculation table for CRM performance.

| Customer Value | Benchmark | Score | Weight | Score |
|----------------|-----------|-------|--------|-------|
| Increasing the number of new customers | Percentage increase in the number of new customers | 4 | 1 | 4 |
| Amount | | 1 | | 4:00 |

| Customer Satisfaction | Benchmark | Score | Weight | Score |
|-----------------------|-----------|-------|--------|-------|
| Improved quality of service | The decline in the number of complaints of | 2 | 0:22 | 0:44 |
| Increased customer satisfaction | Improving customer satisfaction | 4 | 0:33 | 1:32 |
| Improved product innovation & service | The number of products & new services | 3 | 0:45 | 1:35 |
| Amount | | 1 | | 3:11 |

| Customer Interaction | Benchmark | Score | Weight | Score |
|----------------------|-----------|-------|--------|-------|
| The effectiveness of marketing strategy | Effectiveness among the marketing costs & increase sales by customer | 3 | 0.84 | 2:52 |
| The development of events with customers | The number of activities held | 3 | 0:16 | 0:48 |
### Customer Knowledge

| The Strategic Objective                                      | Benchmark                                                                 | Score | Weight | Score |
|--------------------------------------------------------------|---------------------------------------------------------------------------|-------|--------|-------|
| System updates customer security technology                  | Performance level system customer security technology and the combination of data warehousing and data mining | 4     | 0:30   | 1.2   |
| Increased understanding of customer needs                    | Percentage of customer desires and market developments                    | 4     | 0:57   | 2:28  |
| Development of product packages on application               | Number of package innovation is proud                                     | 2     | 0:13   | 0:26  |

**Amount**

| Score | Weight | Amount |
|-------|--------|--------|
| 1     | 3.00   | 3.74   |

### 10. CRM Performance Measurement

In bookkeeping CRM performance perspective value comes from the value of CRM performance measurement of each strategic destination. The weight of the performance calculation is 0:25, where the weight is obtained from the fourth perspective that results in a value of 1. A value of 1 to 4 are in accordance with the amount of perspective. Pengukura calculation method used in this performance CRM-Scorecard can be seen from the table below.

| Table 5 Performance Measurement Each Perspective |
|--------------------------------------------------|
| Perspective          | Score | Weight | Score x Weight |
| Customer value       | 4:00  | 0:25   | 1               |
| Customer satisfaction| 3:11  | 0:25   | 0.78            |
| Customer interaction | 3:00  | 0:25   | 0.75            |
| Customer knowledge   | 3.74  | 0:25   | 0.94            |
| **Total**            | 1     |        | 3:47            |
From the results of performance measurement in the above table was obtained a yield of 3.47, which means the value of CRM applications MyXL performance is good. With the smallest contribution in perspective customer satisfaction and customer interaction. Thus, evaluation of improvements must first be done is the customer perspective satisfaction and customer interaction.

CONCLUSION

Based on the results of research and discussion on research with performance measurement pliers customer relationship management MyXL applications with CRM Scorecard perspective, it can be concluded as follows:

1. CRM performance measurement results for each perspective obtained a total score of 3.47. where the highest contribution is in the customer value perspective with a value of 4.00, perspective customer satisfaction contributes to the value and perspective 3:11 customer knowledge with a value of 3.74, while the customer interaction perspective gives the lowest contribution with a value of 3.00 and, then it can be said that the most influential perspective is the customer value perspective.

2. The results of the questionnaire in perspective customer satisfaction, Based on the results of the Cartesian diagram attributes that need to be left is an attribute that a high level of importance, but the level of satisfaction was below average. Attribute - The attribute is X4.2 (Companies often provide package promos in the application) and attributes X5.1 (Application provides services license of the customer).

3. CRM performance measurement system Scorecard by using four perspectives CRM Scorecard lowered into nine strategic goals, complemented by a strategic map and a table containing the research perspective, the strategic objectives, Tolakukur, the targets, and the assessment scale. And equipped with a weighting between strategic objectives.

REFERENCES

Afrina, M., Ibrahim, A., Sistem, J., Fakultas, I., Komputer, I., Response, A., … Sriwijaya, U. (2013). Rancang Bangun Electronic Costumer Relationship Management (E-CRM) Sebagai Sistem Informasi Dalam Peningkatan Layanan Perpustakaan

Digital Fakultas Ilmu Komputer Unsri., 5(2), 629–644.

Al-safi, A. M., Al-safadi, L., & Al-mudimigh, A. (2012). CRM Scorecard - CRM Performance Measurement, 2, 8–21.

Alina, C. (2016). Social Media – a Strategy in Developing Customer Relationship Management. Procedia Economics and Finance, 39(November 2015), 785–790. https://doi.org/10.1016/S2212-5671(16)30266-0

Badariah, N., Suhardini, D., Rahmanto, A. W., Industri, J. T., Trisakti, U., Industri, J. T., & Trisakti, U. (n.d.). Perancangan Kinerja Customer Relationship Management Dengan Menggunakan Metode, 10–19.

Bagheri, M., & Khorrami, H. (2016). Evaluating human factors in customer relationship management Case study : private banks of Shiraz city. Procedia Economics and Finance, 36(16), 363–373. https://doi.org/10.1016/S2212-5671(16)30048-X

Dyantina, O., Afrina, M., & Ibrahim, A. (2012). Penerapan Customer Relationship Management (CRM) Berbasis Web (Studi Kasus Pada Sistem Informasi Pemasaran di Toko YEN-YEN) 1,2,3, 4(2), 516–529.

Fatimah, S. (2014). Model Crm-Scorecard Untuk Pengukuran Kinerja Customer Relationship Management ( Crm ) Studi Kasus : Ikm Tas Dan Koper Intako Tanggulangin, 1–13.

Gholami, H., Zameri, M., Saman, M., Sharif, S., & Zakuan, N. (2015). A CRM strategic leadership towards sustainable development in student relationship management : SD in higher education. Procedia Manufacturing, 2, 51–60. https://doi.org/10.1016/j.promfg.2015.07.010

Ibrahim, A. (2017). Dampak Penerapan CRM terhadap Layanan di Perguruan Tinggi, 3(1), 57–59.

Ikasari, N., Chaerany, N., Nur, T., Industri, J. T., Industri, F. T., Indonesia, U. M., … Organisasi, B. (2016). Pengaruh Implementasi Customer Relationship Management Dan Budaya Organisasi Terhadap Peningkatan Kinerja Perusahaan

Digital Fakultas Ilmu Komputer Unsri., 5(2), 629–644.

Al-safi, A. M., Al-safadi, L., & Al-mudimigh, A. (2012). CRM Scorecard - CRM Performance Measurement, 2, 8–21.

Alina, C. (2016). Social Media – a Strategy in Developing Customer Relationship Management. Procedia Economics and Finance, 39(November 2015), 785–790. https://doi.org/10.1016/S2212-5671(16)30266-0

Badariah, N., Suhardini, D., Rahmanto, A. W., Industri, J. T., Trisakti, U., Industri, J. T., & Trisakti, U. (n.d.). Perancangan Kinerja Customer Relationship Management Dengan Menggunakan Metode, 10–19.

Bagheri, M., & Khorrami, H. (2016). Evaluating human factors in customer relationship management Case study : private banks of Shiraz city. Procedia Economics and Finance, 36(16), 363–373. https://doi.org/10.1016/S2212-5671(16)30048-X

Dyantina, O., Afrina, M., & Ibrahim, A. (2012). Penerapan Customer Relationship Management (CRM) Berbasis Web (Studi Kasus Pada Sistem Informasi Pemasaran di Toko YEN-YEN) 1,2,3, 4(2), 516–529.

Fatimah, S. (2014). Model Crm-Scorecard Untuk Pengukuran Kinerja Customer Relationship Management ( Crm ) Studi Kasus : Ikm Tas Dan Koper Intako Tanggulangin, 1–13.

Gholami, H., Zameri, M., Saman, M., Sharif, S., & Zakuan, N. (2015). A CRM strategic leadership towards sustainable development in student relationship management : SD in higher education. Procedia Manufacturing, 2, 51–60. https://doi.org/10.1016/j.promfg.2015.07.010

Ibrahim, A. (2017). Dampak Penerapan CRM terhadap Layanan di Perguruan Tinggi, 3(1), 57–59.

Ikasari, N., Chaerany, N., Nur, T., Industri, J. T., Industri, F. T., Indonesia, U. M., … Organisasi, B. (2016). Pengaruh Implementasi Customer Relationship Management Dan Budaya Organisasi Terhadap Peningkatan Kinerja Perusahaan
Manufaktur Dengan Pendekatan Crm-Scorecard E-ISSN : 2541-3090 , ISSN Paper : 2503-1430 Journal of Industrial Engineering Management, 1(2), 21–29.

Irawaty, E., Prihanto, H., & Suhardini, D. (2006). Sistem pengukuran kinerja customer relationship management dengan metode crm-scorecard.

Kahreh, M. S. (2012). Management Science Letters, 2, 1603–1612. https://doi.org/10.5267/j.msl.2012.05.006

Kim, J. (n.d.). A Model For Evaluating The Effectiveness Of Crm Using, 17(2), 5–19. https://doi.org/10.1002/dir.10051

Kubina, M., & Lendel, V. (2015). Successful Application of Social CRM in The Company. Procedia Economics and Finance, 23(October 2014), 1190–1194. https://doi.org/10.1016/S2212-5671(15)00487-6

Lhpp, D. I., & Martadinata, L. I. A. (2015). Pendidikan Bahasa Inggris Menggunakan Metode Service Quality ( SERVQUAL ), 03(01), 61–72.

Mahmudi, A. A., Raya, J., & Rembang, R. K. M. (2017). Pengukuran Kinerja Customer Relationship Management ( Crm ) Menggunakan Crm Scorecard Dan Omax, 3(2), 83–91.

Pradita, N., Suhardini, D., Industri, J. T., Industri, F. T., Trisakti, U., & Map, S. (2018). Perancangan Sistem Pengukuran Kinerja Customer Relationship Management Menggunakan Metode Customer Relationship Management ( Crm ) Scorecard Pada Hotel Grage, 69–76.

Rahma, A., Nuryani, P., Santoso, I., & Deoranto, P. (2014). Analisis Kualitas Pelayanan Terhadap Kepuasan Konsumen Dengan Metode Servqual ( Studi Kasus di Ria Djenaka Coffee House & Resto , Malang ) Service Quality on Customer Satisfaction Analysis by SERVQUAL Method ( Case Study at Ria Djenaka Coffee & Resto , Malang ), (quadrant I), 1–8.

Santouridis, I., & Tsachtani, E. (2015). Investigating the Impact of CRM Resources on CRM Processes : a Customer Life-Cycle Based Approach in the Case of a Greek Bank. Procedia Economics and Finance, 19(15), 304–313. https://doi.org/10.1016/S2212-5671(15)00031-3

Saputro, O. J., Keahlian, B., Industri, M., Studi, P., Managemen, M., & Organisasi, K. (2013). perancangan sistem pengukuran kinerja hubungan pelanggan dengan metode crm- scorecard ( Studi Kasus Di PT . Bank Syariah ABC ), 1–8.

Simbolon, F. (n.d.). Model Pengukuran Kinerja Customer Relationship Management Dalam Industri Perbankan, 5(9), 278–287.

Sudaryo, Y., Alfarisi, A. S., & Kusumawardani, A. (2015). ( CRM SCORECARD ) MODEL TO SUPPORT PERFORMANCE, 97(24), 149–160.

Suhardini, D., Surjasa, D., & Mustika, G. D. (2017). Perancangan dan pengukuran kinerja crm untuk jasa transportasi bus akap di gms, 7(2), 76–86.

Susanty, A., & Rumita, R. (n.d.). Oen Semarang Menggunakan Metode Crm Scorecard.

Telecom, B. H., & Engineering, T. (2008). ” Trends In The Development Of Machinery And Associated Technology ” Balanced Scorecard Vs . Performance Prism Mustafa Cengic Bosnia and Herzegovina Damir Fazlic Energoinvest, 421–424.

Triwibowo, S., Rukmi, H. S., & Harsono, A. (2014). Usulan Peningkatan Kualitas Pelayanan Pada Kawasan Wisata Kawah Putih Perum Perhutani Jawa Barat dan Banten dengan menggunakan Metode Service Quality ( SERVQUAL ), 02(01), 13–23.

Untuk, A. B. C., Tingkat, M., Studi, P., Asahimas, P. T., Manajemen, S., Pangan, K., … Yang, I. (2011). T e k n i k I n d u s t r i, 1(2).