CUSTOMER EQUITY IN A NETWORK DRIVEN CONTEXT - CONTRIBUTIONS FOR EVALUATING CUSTOMER EQUITY

Dipl.Ing. Markus Moritz[1], Sonja Keppler, Ph.D.[2]
[1]S-Y Systems Technologies Europe GmbH, Federal Republic of Germany
[2]Cyprus International University, Republic of Cyprus, sonja.keppler@eu-edu.ch

Abstract

Customer Equity Management (CEM) is not only a method to analyze future customers' behavior but also a segmentation tool for identifying customers that deliver a great value to a company and those that should be eliminated from a company's customer portfolio. One problem companies in industry are facing nowadays is the heterogeneous customer portfolio structure and the fact, that customer equity (CE) calculation models are referring to a company's turnover and are not profit oriented. Thus, a customer (that can be an organization, company or an individual) providing the selling company with a big turnover is more or less of greater value than a customer delivering a minor turnover. This may lead to mismanagement and wrong budget decisions. Therefore CE is a key indicator for a company's Customer Relationship Management (CRM) environment.

In this paper, first the customer equity will be explained with its monetary and non-monetary dimensions. Secondly a new and applicable model will be introduced and discussed before starting with solving the problem of a heterogeneous customer portfolio, which is very important for companies dealing with a multi-level key market (e.g. lighting industry). The outcome of this paper is a network based CE calculation model, which is dynamic and can be used for different network structures - not only in an industrial environment.

JEL Classification: D11, P36, P46

Keywords: Customer Equity; Customer Equity Management; Customer Behavior; Customer Segmentation; Customer Portfolio Management; Customer Relationship Management

Introduction

Customers in a network context mean companies, organizations, and individuals delivering a certain monetary and non-monetary value to another network actor, which also can be a company, organization or just another individual. In this case always a bidirectional relationship between a seller and a customer is described. As a result two main perspectives can be defined, (i) customer value from a customer perspective where the focus is on delivering value from a company to a customer, and (ii) customer value from a company's perspective where value is delivered from a customer to a company (Verhoef & Lemon; 2013, p 1). From a seller's perspective, of course, customers are very important as they are the primary source for bringing value into the business (Amue et al.; 2013, p. 1).

However, value can only be measured in the first instance in a profit and loss (earnings and expenses) context, where profit means the value delivered by a customer and loss means the customer driven expenses a company needs to invest in. As already stated above, there is a difference between monetary (e.g. turnover and profit) and non-monetary value (e.g. cross-buying and referrals). CEM as a network-oriented management approach leads to a more specific view on customer-driven costs versus customer generated value. The outcome is a more efficient and effective allocation of the actor's own resources as well as metrics not only to measure but to make the network structure more transparent (Villanueva & Hanssens; 2007; p. 3).

One famous method for analyzing the CE is the so called Customer Lifetime Value analysis (CLV), even if it is not easy to use, but its structure reminds of financial discounting investment strategies (Jaeck; 2014, p. 2). CLV displays the current financial situation and the prospective cash flow of a customer relationship but has its limitations for using it, like predicting customers' behavior or the limited amount of considered non-monetary values (Abdolvand et al.; 2013, p. 42). Due to these limitations and because of the fact, that CE's main drivers are also non-monetary values an applicable metric must be found combining the past and future company's perspective as well as CE non-monetary dimensions, that combine the customer's market potential (earning potential, loyalty potential, growth potential, cross-buying potential) and resource potential (reference potential, synergy potential, information potential, cooperation potential) from a past-to-current and a current-to-future perspective (Moritz; 2011, p. 11). In a network- driven context the CE is a key driver for evaluating a certain network value if considering a full set of actors on shareholder and stakeholder side.

Customer Potential and Customer Profit

For evaluating the CE it is necessary to consider past-related as well as future-related figures, because if the CE is only considered past-related we only have a one-dimensional perspective, which leads to wrong strategy definitions and implementation. Thus, the whole customer lifetime circle must be considered (Carr; 2012, p. 1). On the one hand, there is the future-oriented CE, which can also be called Customer Potential (CPO), and on the other hand the past-oriented CE, called Customer Profit (CPR), can be introduced. Combined, this will be the first step to evaluate the Delivered Customer Value (DCV), which will be used as a key dimension for the Network or Node Weight in a network oriented approach.

Even though CE is meant to combine customer value management, brand management, relationship management, and retention management (Abadi et al.; 2013, p. 2), CE should be not only be considered for marketing activities in a short view but for evaluating a company's strategic thinking cross-functionally. From a user's point of view the CE calculation model needs to be as simple as it can be in usage and understanding, as well as adaptive, easy to control and it must focus on relevant elements for a company's strategy (Villanueva & Hanssens; 2007; p. 10). First it is necessary to define the Customer Profit in order to find a more practical approach (see figure 1):

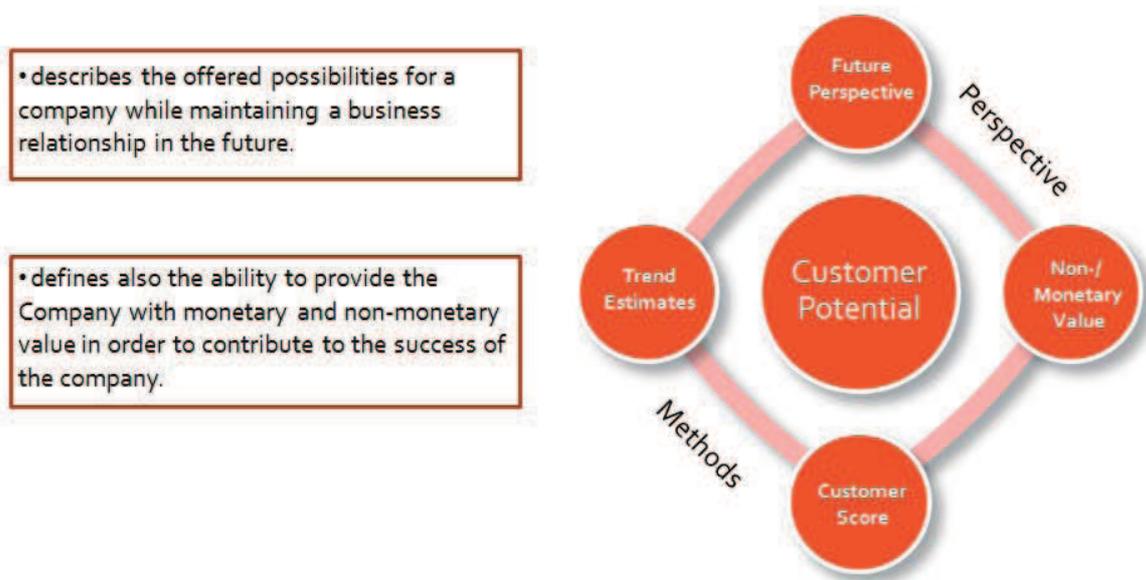**Fig. 1.** Customer Net Profit Evaluation
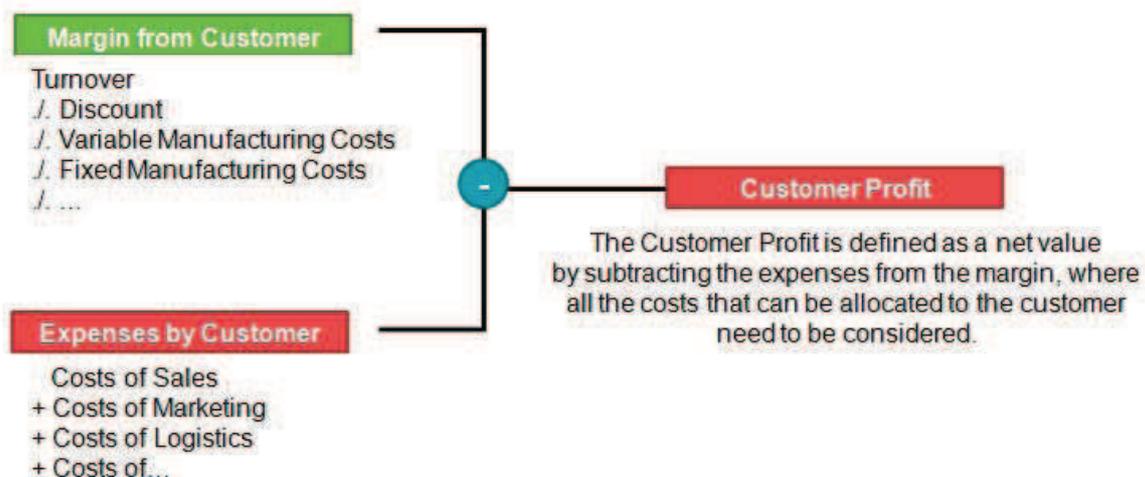
Source: Authors' own work.

The above-mentioned calculation is a template which can be changed accordingly to a company's specific needs, as the usage of the different modules (Costs of Sales, Costs of Marketing, etc.) are based on the company's own business as well as network structure. One advantage is: it is very easy to implement also in project organizations or other network-driven business environments.

The next step is to evaluate and calculate the CPO in order to implement a future-related perspective into the CEM framework:

Fig. 2. Definition of Customer Potential

• describes the offered possibilities for a company while maintaining a business relationship in the future.

• defines also the ability to provide the Company with monetary and non-monetary value in order to contribute to the success of the company.

Future Perspective

Perspective

Trend Estimates

Customer Potential

Non-/Monetary Value

Methods

Customer Score

Source: Authors' own work.

Therefore it is recommended to use a scoring model based on monetary and non-monetary dimensions, as scoring models can be found in various ways to enhance a CEM perspective by evaluating the CE core metrics (Wortmann; 2012, p. 58). As the name tells us, the CPR is a profit-related figure. In order to calculate a more profit-related value for the CPO, we have to adjust the following calculation in correlation to a trend analysis:

Fig. 3. Calculating the Customer Profit and Customer Potential
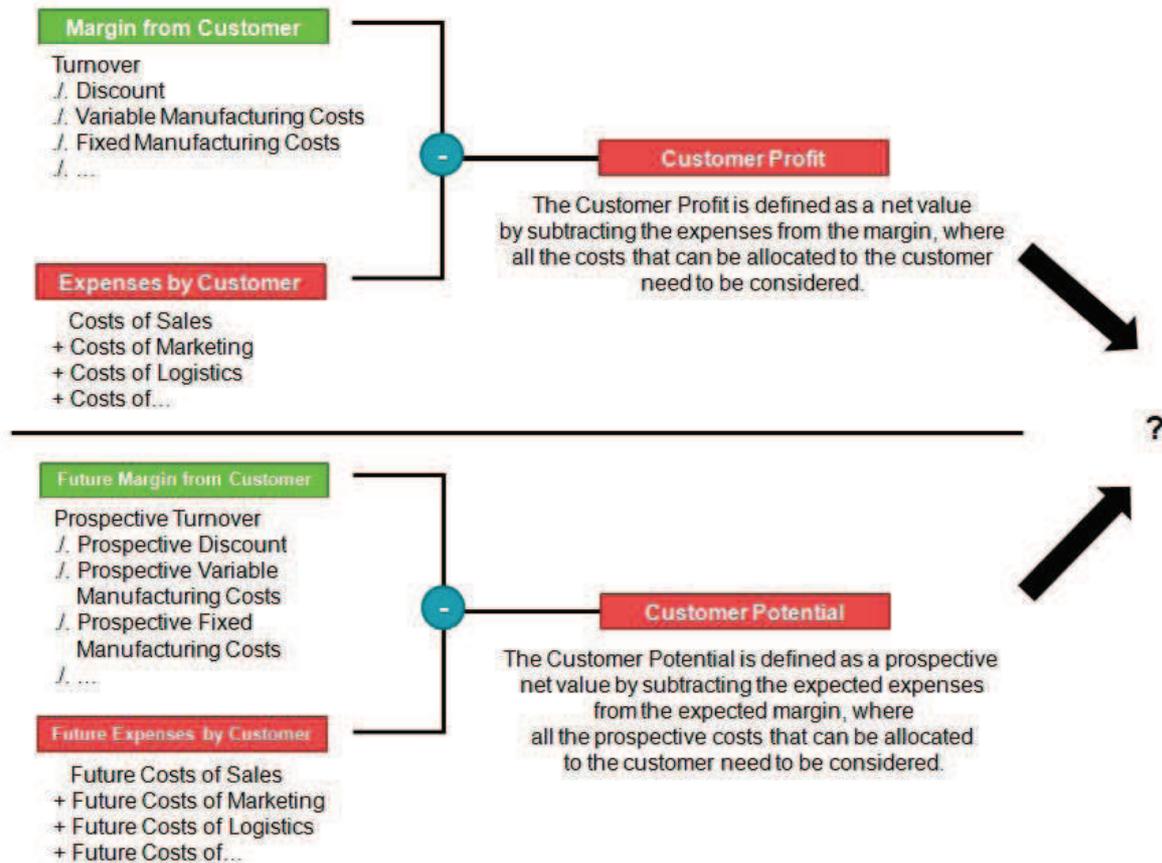
Source: Authors' own work.

The assumption would be to just add the CPR and CPO to get as a result the needed Delivered Customer Value (DCV). However, the problem is, that according to the above-mentioned calculation processes, also the values are still turnover-related, and this could lead to problems if a company does not have a homogeneous but heterogeneous customer portfolio, as it is the case for companies dealing with a multi-level key market (e.g. lighting industry). Additionally it is important to add the non-monetary values as modules to the future margin and future expenses driven by the customer, because customer loyalty, customer satisfaction and customer retention do have a significant impact on the CE and vice versa.

Customer Investment Rate

Thus, next step is to solve the problem that the output of both metrics is still turnover-related and thus in a heterogeneous customer portfolio not every customer can be compared or segmented properly. This leads to a simple question: If I

invest 1 Euro in my customer, which amount of money can I get out of it? Because, as already mentioned, the problem with customer segmentation based on turnover is: (i) the customer with the highest turnover will be classified as a top-customer, and (ii) the customer with the highest CPO will also be classified as a top-customer. The question can be answered by taking the ROI (Return on Investment) as a basis:

Metric 1. Calculating the Return on Investment (ROI)

$$ROI = \frac{Total\ Benefits - Total\ Costs}{Total\ Costs}$$

Source: Corman; 2012 p. 6

Once again: If I invest 1 Euro in my customer, which amount of money can I get out of it? The solution might be to implement a new KPI (Key Performance Indicator), where it is not important to take the turnover as a basis but the profit as an outcome of the relationship between seller and customer. And the ROI (Return on Investment) provides a first approach to solve this problem. Investments a company places throughout its customer portfolio need to be valued more profit-related, therefore the Customer Investment Rate (CIR) will be used with the ROI as a basis:

Metric 2. Calculating the Customer Investment Rate (CIR)

$$Customer\ Investment\ Rate = \frac{Customer\ Profit + Customer\ Potential}{Customer\ Expenses}$$
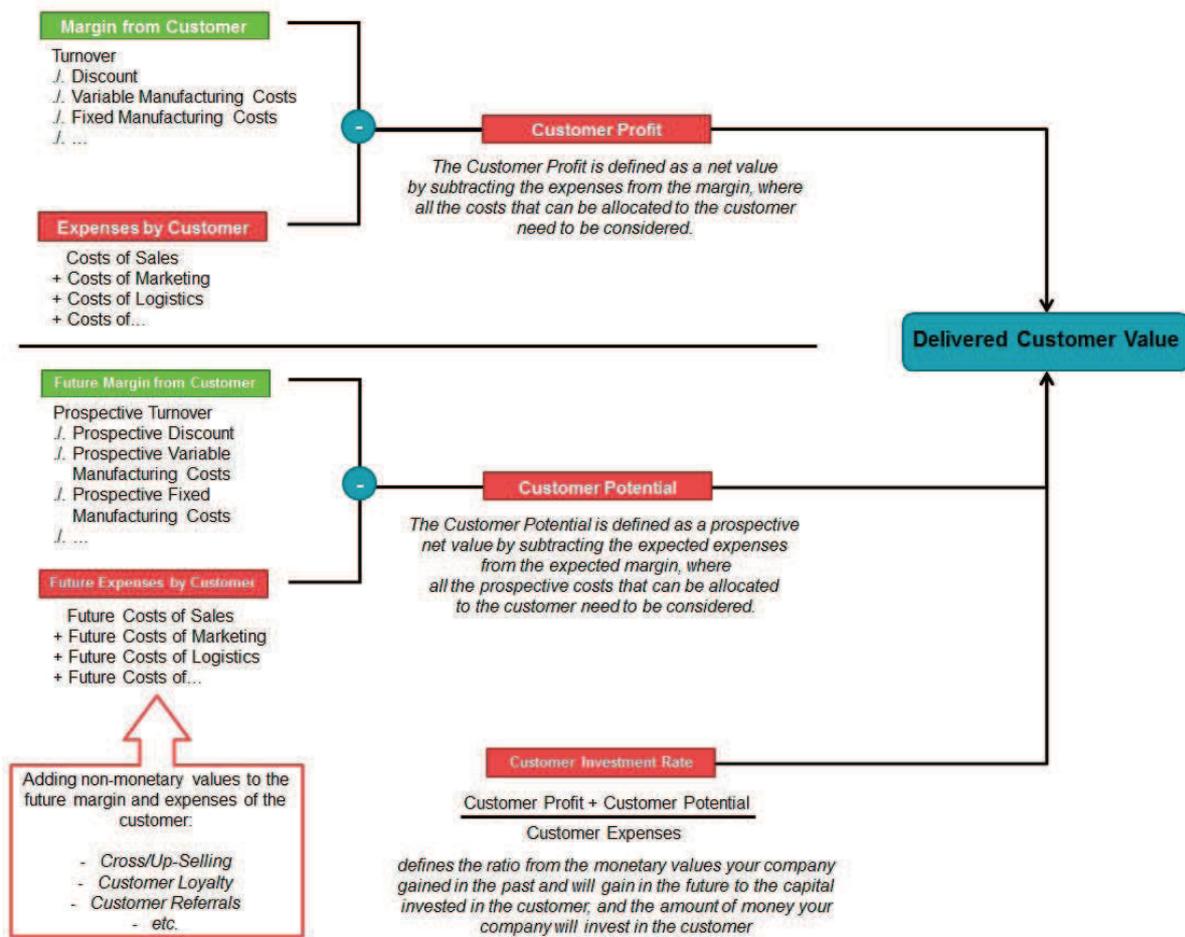
Source: Authors' own work.

"*The Customer Investment Rate defines the ratio from the monetary values your company gained in the past and the monetary and non-monetary value is about to gain in the future in relation to the capital invested in the customer, and the amount of money your company is going to invest in the customer in the future* (Moritz; 2013, p. 52)."

The CIR is the main driver for evaluating heterogeneous nodes in a network defined as customers. Referring to customers, the model introduced above is called the CIR-Customer Equity Model and can be used for any network related CE investigation or evaluation. In order to apply this model, the CIR-Customer Equity Model needs to be evaluated for every single customer in a network and can then

be used to segment or group customers not only for marketing activities but also in areas like Key Account Management.

The result is a combination of CPR, CPO and CIR to evaluate the DCV:
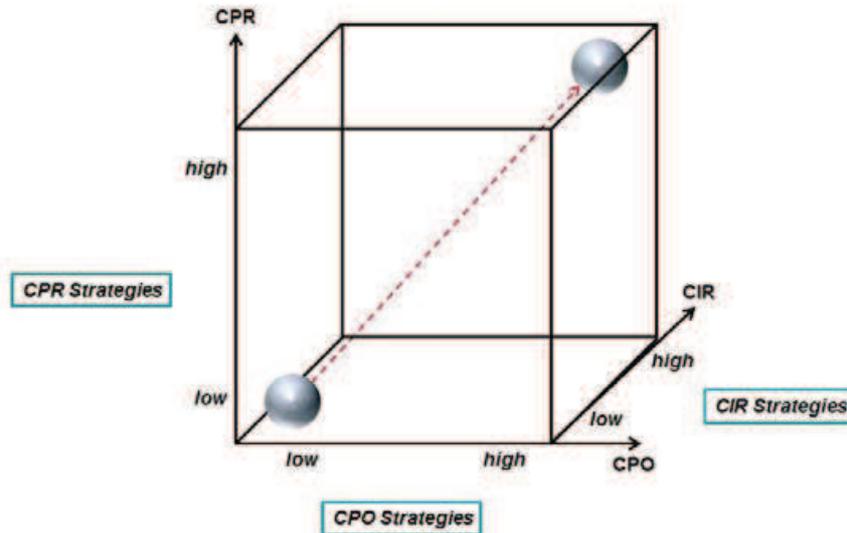
Fig. 4. DCV Calculation

Source: Authors' own work.

For further segmentation processes, the correlation between CPR, CPO and CIR can be visualized in correlation to a multi-dimensional strategy definition, as follows (example):

Fig. 5. Correlation between CPR, CPO and CIR

Source: Authors' own work.

A multi-dimensional strategy formulation means that every dimension (KPI - Key Performance Indicator, etc.) needs to be ranked in the overall context. After this it is recommended to set the priorities for the different dimensions in context to and with regard to a company's targets and objectives. Regarding the DCV, it could be characterized in different ways:

Fig. 6. Different value specification regarding the DCV dimensions
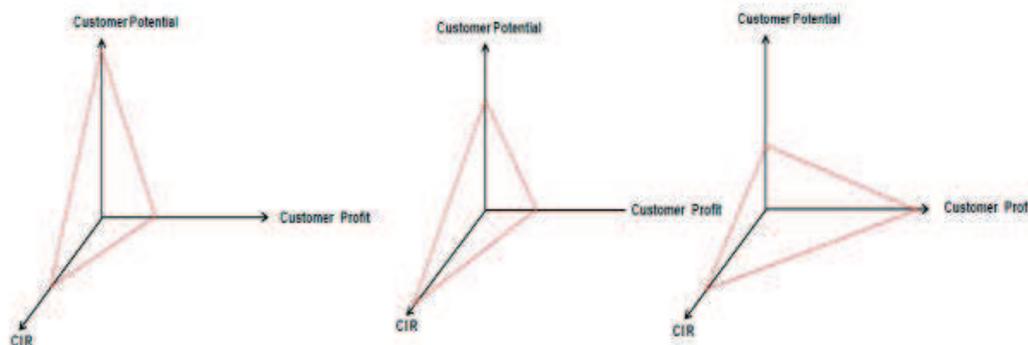
Source: Authors' own work.

Of course, if we do not only consider the DCV but also the other Networking Management forces like (i) RI (Relationship Intensity), (ii) TL (Threshold Level), (iii) IQ (Information Quality), (iv) NW (Networks/ Node Weight), (vi) SV (Supplier Value), strategies need to be formulated for all of them according to a company's set of targets. One way is to use a 3-level strategy definition:

Fig. 7. 3-Level Strategy Definition

1st Level Strategies	2nd Level Strategies	3rd Level Strategies
(1) Lead & Secure	1.1. Sub-Strategy 1.2. Sub-Strategy 1.3. Sub-Strategy 1.4. Sub-Strategy	1.1.1. Sub-Strategy 1.1.2. Sub-Strategy 1.1.3. Sub-Strategy 1.1.4. Sub-Strategy
(2) High Investment	2.1. Sub-Strategy 2.2. Sub-Strategy 2.3. Sub-Strategy 2.4. Sub-Strategy	2.1.1. Sub-Strategy 2.1.2. Sub-Strategy 2.1.3. Sub-Strategy 2.1.4. Sub-Strategy
(3) Low Investment	3.1. Sub-Strategy 3.2. Sub-Strategy 3.3. Sub-Strategy 3.4. Sub-Strategy	3.1.1. Sub-Strategy 3.1.2. Sub-Strategy 3.1.3. Sub-Strategy 3.1.4. Sub-Strategy
(4) Disinvestment	4.1. Sub-Strategy 4.2. Sub-Strategy 4.3. Sub-Strategy 4.4. Sub-Strategy	4.1.1. Sub-Strategy 4.1.2. Sub-Strategy 4.1.3. Sub-Strategy 4.1.4. Sub-Strategy 4.2.1. Sub-Strategy ...

Source: Authors' own work.

Conclusion

The CIR-Customer Equity Model combines three different approaches for evaluating the CE or so called DCV in a network-related context by valuing the CPR, CPO and the CIR. It is not only possible now to compare heterogeneous customers but also to define strategies along the different approaches in order to increase the CE of a customer or a group of customers. Future attempts will show that a three level strategy definition can be used to control not only a single customer but also different customer groups. In a network-driven environment it is essential to realize that there is a bidirectional exchange of information between two or more actors and that one actor may play a significant role in a company's business relationship in order to acquire or retain other current and future customers.

However, as it is known that acquisition costs beat retention costs it is also necessary for a company to keep their customer-driven costs as low as possible. Efficiency versus effectiveness nowadays is a key issue for companies and thus it is necessary to make customers as much transparent as could be from a cost point of view. And this can only be achieved by using metrics that allow a company to compare heterogeneous customers.

The advantage of the CIR-Customer Equity model is that it is easy to use and easy to extend by putting additional modules into the metrics that play a significant role for the company, considering monetary as well as non-monetary CE dimensions.

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