THE CONCEPT OF CUSTOMER COST ACCOUNTING IN CUSTOMER RELATIONSHIP MANAGEMENT

In any enterprise, the customer plays a key role as the main “provider” of revenue. The profitability of a particular enterprise depends on appropriate customer relations. Profitable customer relations are crucial for conducting and continuing business. The purpose of this article is to present the author’s concept of customer cost accounting, which will effectively support decision-making in optimizing customer relations. The main basis for the conceptual work on the customer account is research conducted on 178 companies, the results of which clearly indicated the need to analyze the profitability of customer relationships. The research used a survey questionnaire and statistical tools. First, basic statistical measures were applied. Non-parametric tests were used to evaluate the relationships between variables: Pearson’s chi-square test, Spearman’s rank correlation, and the Kruskal-Wallis ANOVA test. Through the research, three theses were falsified and confirmed.

Keywords: customer, costs, customer relationship management.

1. INTRODUCTION

The main goal of any business is to achieve a positive financial result. This statement is particularly relevant in the short term, because in the long term, business owners expect the value of their enterprises to increase. However, value growth for owners is not possible without sustained maintenance of a positive financial result in the operational dimension. For this reason, the actions of business managers are constantly evaluated through a financial prism. The profitability of a given action justifies the legitimacy of its performance.

Profitability, in general, is defined as the achievement of business revenues that exceed the costs of doing business (Drabik, Kubiak-Sokól, Sobol, Wisnikowska, 2009). Profitability is also a measure of the effectiveness of an activity, and that of an effective activity. Efficiency is a measure that determines the ratio of the results of an activity to the expenditures an enterprise has incurred to achieve those results. Efficiency, on the other

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1 Grzegorz Lew, Rzeszow University of Technology, Poland; e-mail: lewgrzes@prz.edu.pl (corresponding author). ORCID: 0000-0002-0067-8562.
2 Magdalena Bochenek, Rzeszow University of Technology, Poland; e-mail: m.bochenek@prz.edu.pl. ORCID: 0000-0002-7089-2601.
hand, is the ability to achieve the desired results (Drabik et al., 2009). It is often measured in terms of binary or percentage performance.

Profitability will present a certain dichotomous perception of business: on the one hand, it concerns revenues that increase this profitability, and on the other hand, one must reckon with the costs that are inevitably associated with the generation of revenues.

Presenting a simplified model of an enterprise, it can be said that its registration and subsequent operation entails costs (Lew, 2019), and the enterprise obtains revenues from its environment. “Donor” of these revenues are customers.

Drucker P. stated explicitly that there is only one valid definition of business purpose: to create a customer. The customer is the foundation of the business and sustains its existence (Drucker, Maciariello, 2004).

Many scholars have argued the importance of customers to the ability to conduct and profitably continue business, identifying the customer as a key source of value for the enterprise. Seybold P., based on her research, has shown that the value of a business is derived from the value of future cash flows expected from customers (Seybold, Marshak, Lewis, 2001).

The importance of the customer to businesses has been called customer value, which has been attempted to be represented by various models. One of them was the customer value model developed by S. Gupta D.R. Lehmann and J.A. Stuart, through which they proved the relationship between the market value of a company and the profitability and loyalty of its customers. They believe that customers are an important intangible asset of a company, which should be measured and properly managed (Gupta, Lehmann, Stuart, 2004). In turn, H.H. Bauer, M. Hammerschmidt, M. Braehler propose a model (Bauer, Hammerschmidt, Braehler, 2003) that takes into account many different categories resulting from customer relationships arguing that all of them are important in creating customer value. Customers as an asset of a company in the form of customer relationships are treated by R.K. Srivastava, T.A. Shervani, L. Fahey because they increase shareholder value by accelerating and increasing cash flow (Srivastava, Shervani, Fahey, 1998). Polish researchers also argue that the vast majority (about 90%) of the company’s value is created by customers, who imply cash flow, the amount of profit earned (Dobiegala-Korona, 2011).

The analysis of the scientific literature showed that companies should orient their activities towards customers and create profitable and long-term relationships with them. For this reason, the authors recommend that business managers implement and apply management accounting methods that will effectively support their decisions in creating and maintaining profitable customer relationships. There is still a lack of studies on applicable tools to support the maintenance of profitable customer relationships. The authors resolve to conduct research on the relevant criteria affecting customer relationships and propose a customer cost accounting model that supports customer relationship management by providing reliable information on the profitability of these relationships.

The purpose of the article is to present the author’s concept of customer cost accounting, which would effectively support decision-making in optimizing customer relationships. As support for the goal, three theses were put forward, the falsification of which will help realize the main objective of the research:

T1: Employees in the surveyed entities are aware that customers are the main source of revenue for companies.

T2: The main criteria that customers consider when buying from a supplier are quality and price.
T3: Business managers are aware of the need to study the profitability of customer relationships, and this type of research is carried out in companies all the time.

The research used methods of scientific literature review and critical analysis, survey method, statistical methods, primarily for quantitative research results such as Pearson's chi-square test, Spearman's rank correlation and Kruskal-Wallis ANOVA test. Modeling, which is one of the main research methods in the social sciences, was also used.

2. CUSTOMER RELATIONS – A REVIEW OF THE LITERATURE

Customers are seen as part of a company's environment, without which the creation of company value is not possible. For this reason, companies must provide them with goods and services that will meet their expectations. In order to attract and retain customers, they are “condemned” to the need to collect, process and properly use information on all forms of relationships occurring between the enterprise and the customer. Efficient acquisition and transfer of information depends on the quality of communication with customers.

In the current stage of development of markets, it is extremely important to be able to maintain long-term effective relationships with customers. Maintaining long-term relationships with customers means continually satisfying their changing needs over time. A need is defined as an objective property of an organism or a subjective feeling of lack (Rekowskii, 1970). A need is defined differently by J. O'Shaughnessy, who defines it as an inclination to use or have (O'Shaughnessy, 1994).

Relationships with customers are relationships linking an enterprise and the customers of that enterprise (Otto, 2004; Dembińska-Cyran, Holub-Iwan, Perek, 2004). Authors of accounting studies view customer relationships in a transactional context, i.e. as the sum of all sales transactions whose financial effect is revenue (Hendriksen, van Breda, 2002). However, such a view of customer relations is too narrow and significantly distorts the ability to manage them.

In contemporary trends in business management, more and more attention is paid to the importance of long-term, effective relationships with customers (Kubacka 2023). H. Mintzberg, too, believes that establishing and maintaining external contacts and creating advocacy groups outside the enterprise are activities to which managers must devote a lot of time (Mintzberg, 2012). A trend known as customer relationship management (CRM) will develop in theory and practice (Wereda, 2009; Dyche, 2002; Kevork, Vrechopoulos, 2009). Customer relationship management is the cornerstone of a business philosophy oriented toward analyzing, planning and controlling customer relationships using the latest information and communication techniques (Dobiegała-Korona, 2006). Sales departments do not focus on maximizing the profitability of individual transactions. Customer profitability, that is, profitability over the long term and the creation of customer value, is considered a key concern.

In order to create customer value, an enterprise must take appropriate actions that will contribute to increasing customer value or satisfying the needs of the enterprise (Miler, 2000). The concept of creating customer value grows out of the theory of demand economics, goods (products) are perceived by customers as a set of characteristics, i.e. quality, functionality, physical and chemical form, price and others, which can be freely shaped to meet their expectations. Customers may have different degrees of preference for the above-mentioned characteristics, which allows companies to differentiate their sales policies towards different customers or groups of customers (Nita, 2006). In view of the above, companies can undertake various activities aimed at creating value for customers...
of a given product so that it finds recognition with them. These activities, although performed to optimize sales revenues will, of course, generate certain costs. These costs will largely depend on the type of activities used to achieve the objectives.

In order to identify the activities that contribute most to gaining and maintaining competitive advantage, they should be analyzed. As part of the analysis of activities, they should be divided into value-creating and non-value-creating activities for owners or customers. Activities in a company are primarily performed for three reasons (Blocher, Stout, Cokins, 2010):

- Are necessary to meet customer needs and expectations,
- are needed to sustain the enterprise as a whole,
- benefit the company.

When offering a product to a customer, an enterprise creates a commercial service through its activities that make up the internal value chain. Since every activity in an enterprise should be subordinated to the creation of enterprise value, enterprises must be able to identify those activities that create this value. For the reason that the main source of value creation for an enterprise is customers, activities should be considered in the context of activities that create the customer perceived value (CPV) or do not create it. And in the context of these activities, it is necessary to be able to determine their costs, which will determine, of course, together with the revenue generated through these customers, the profitability of the customer relationship.

3. MATERIALS AND RESEARCH METHODS

The analysis of the scientific literature showed that companies should orient their activities towards customers and create profitable and long-term relationships with them. For this reason, the authors recommend that business managers implement and apply management accounting methods that will effectively support their decisions in creating and maintaining profitable customer relationships. There is still a lack of studies on applicable tools to support the maintenance of profitable customer relationships. The authors resolve to conduct research on the relevant criteria affecting customer relationships and propose a customer cost accounting model that supports customer relationship management by providing reliable information on the profitability of these relationships.

The empirical research conducted began with the formulation of research problems. In the second stage, research methods and techniques were selected. The research procedure used a quantitative method, which consisted of face-to-face surveys using the survey technique, conducted among employees of enterprises with at least 50 employees. The purposive selection was dictated by the results of various scientific studies indicating that more advanced methods of management accounting are used primarily by medium and large enterprises. This is related to the capital capabilities and management needs of these enterprises and resulting from the size and thus the potential of a given enterprise. In addition, statistical methods were used, which included primary data analysis techniques. The analysis was carried out using STATISTICA™.

It is not easy to determine the exact number of the general collective, as the number of enterprises in Poland is very large. According to GUS (Central Statistics Office), the number of non-financial enterprises in Poland in 2019 was 2211.6 thousand entities. Due to such a large number of business units and the associated difficulties in conducting the survey effectively, a decision was made to purposively select the enterprises participating in the survey. The questionnaire of the survey was addressed to nearly 600 enterprises that
operate in southeastern Poland. A return in the form of correctly completed questionnaires was received from 178 respondents.

The final stage of the research procedure consisted of data processing and analysis, STATISTICA™ software was used to code and analyze the data. The analysis resulted in compiled summaries using basic statistical measures, such as count, mean, median, modal, first quartile, third quartile, standard deviation and coefficient of variation.

It was also examined whether there were or were not relationships between certain variables (quantitative, qualitative). The basis for making verification decisions was the comparison of \( \alpha \) (significance level) and \( p \) (test probability). A significance level of \( \alpha = 0.05 \) was adopted if \( p < \alpha \) between variables there are relationships, while if \( p \geq \alpha \), there are no statistically significant relationships between variables.

Non-parametric tests were used to assess the relationships present between variables: the Pearson chi-square test, Spearman's rank correlation and Kruskal-Wallis ANOVA test.

Fewer trade enterprises (41) than service (68) or manufacturing (69) took part in the survey, due in part to the survey group's limitation on the number of employees (more than 49). Information on the number and structure of the surveyed manufacturing, service and trade enterprises is provided in Table 1.

Table 1. Type of business conducted by the surveyed companies

<table>
<thead>
<tr>
<th>Type of activity carried out</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>69</td>
<td>39%</td>
</tr>
<tr>
<td>Service</td>
<td>68</td>
<td>38%</td>
</tr>
<tr>
<td>Commercial</td>
<td>41</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: own study.

Another criterion for the characteristics of the surveyed enterprises is the number of employees employed. Basic descriptive statistics on the number of employees at the surveyed enterprises are shown in Table 2.

Table 2. Number of employees in the surveyed companies - basic descriptive statistics

<table>
<thead>
<tr>
<th>Specification</th>
<th>N</th>
<th>M</th>
<th>Me</th>
<th>Mo</th>
<th>N_{Mo}</th>
<th>Min</th>
<th>Max</th>
<th>Q1</th>
<th>Q3</th>
<th>Std.dev.</th>
<th>V_z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>178</td>
<td>763</td>
<td>138</td>
<td>60</td>
<td>11</td>
<td>50</td>
<td>33000</td>
<td>84</td>
<td>250</td>
<td>3405</td>
<td>446</td>
</tr>
</tbody>
</table>

Symbols: \( N \) – abundance, \( M \) – mean, \( Me \) – median, \( Mo \) – modal, \( N_{Mo} \) – modal abundance, \( Min \) – minimum value, \( Max \) – maximum value, \( Q1 \) – first quartile, \( Q3 \) – third quartile, \( Std.dev. \) – standard deviation, \( V_z \) – coefficient of variation

Source: own study.

Analyzing the data in Table 2, it can be concluded that the surveyed companies have an average of 763 employees. The smallest number of employees is 50, and the largest is 33,000. Half of the enterprises have 138 employees or less, and half have more than 138 employees. Enterprises with 60 employees were the most likely to participate in the survey, with 11 such enterprises. One in four enterprises has 84 employees or fewer. Also, one in four enterprises employs 250 people or more. The high value of the standard deviation...
(3405 people) and the high coefficient of variation (446%) testify to the very high diversity of the surveyed enterprises in terms of employment size.

4. RESEARCH RESULTS

In the survey questionnaire, respondents were asked to identify the people (groups) through whom companies most influence revenue. The response was made by assigning a point scale to each response option, where 1 - no influence of the person on the factor, 9 - the greatest influence of the person on the factor. The results are shown in Figure 1 and Table 3.

The results obtained confirm that respondents rated customers as the people through whom the company generates revenue to the greatest extent, as many as 44% assigned customers a rating of 9. In contrast, respondents considered that no or little influence on the generation of revenue is had by other people not mentioned in the question.

![Figure 1. Degree to which a person influences a company to earn revenue – percentages](image)
Source: own study.

<table>
<thead>
<tr>
<th>Specification</th>
<th>N</th>
<th>M</th>
<th>Me</th>
<th>Mo</th>
<th>NMo</th>
<th>Min</th>
<th>Max</th>
<th>Q₁</th>
<th>Q₃</th>
<th>Std.dev</th>
<th>Vz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>178</td>
<td>6.87</td>
<td>7</td>
<td>8</td>
<td>47</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td>8</td>
<td>1.78</td>
<td>25.89</td>
</tr>
<tr>
<td>Customers</td>
<td>178</td>
<td>7.84</td>
<td>8</td>
<td>9</td>
<td>79</td>
<td>3</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>1.40</td>
<td>17.85</td>
</tr>
<tr>
<td>Management</td>
<td>178</td>
<td>7.22</td>
<td>8</td>
<td>8</td>
<td>57</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td>8</td>
<td>1.47</td>
<td>20.31</td>
</tr>
<tr>
<td>Managers</td>
<td>178</td>
<td>6.48</td>
<td>7</td>
<td>6</td>
<td>53</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td>7</td>
<td>1.52</td>
<td>23.39</td>
</tr>
<tr>
<td>Others</td>
<td>178</td>
<td>3.51</td>
<td>4</td>
<td>1</td>
<td>52</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>2.08</td>
<td>59.28</td>
</tr>
</tbody>
</table>

Symbols: N – abundance, M – mean, Me – median, Mo – modal, NMo – modal abundance, Min – minimum value, Max – maximum value, Q₁ – first quartile, Q₃ – third quartile, Std.dev. – standard deviation, Vz – coefficient of variation

Source: own study.
Analyzing the average rating that respondents assigned to individuals, the highest rating was given to customers (7.84), followed by company managers (7.22) and employees (6.87). The most common rating given to customers was 9 (79 respondents). Next, respondents indicated management (57 respondents assigned a rating of 8) or employees (47 respondents assigned a rating of 8). No one felt that customers had no impact on the company’s revenue (they did not receive a score of 1 or 2).

Of the responses that respondents were asked to choose, the lowest standard deviation value (1.40) and coefficient of variation (17.85) were calculated for customers, that is, this response had the least variation in terms of assigned scores from others. Mainly, high scores were assigned to customers, so they were judged to have a high impact on the revenue obtained by the company. The results of the survey confirm thesis T1.

Respondents were asked to indicate the factors that influence a customer's repeat purchase of a product or commodity, where 1 – the least important factor, 9 – the most important factor. Based on the results obtained, basic descriptive statistics were calculated, which are included in Table 4.

Table 4. Degree of influence of given factors on customer purchase of enterprise products – basic descriptive statistics

<table>
<thead>
<tr>
<th>Specification</th>
<th>N</th>
<th>M</th>
<th>Me</th>
<th>Mo</th>
<th>NMo</th>
<th>Min</th>
<th>Max</th>
<th>Q1</th>
<th>Q3</th>
<th>Std.dev.</th>
<th>Vz</th>
</tr>
</thead>
<tbody>
<tr>
<td>High quality product/goods</td>
<td>178</td>
<td>7,94</td>
<td>8</td>
<td>9</td>
<td>72</td>
<td>3</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>1,24</td>
<td>15,57</td>
</tr>
<tr>
<td>Staff competence and knowledge</td>
<td>178</td>
<td>6,81</td>
<td>7</td>
<td>8</td>
<td>46</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>8</td>
<td>1,56</td>
<td>22,93</td>
</tr>
<tr>
<td>Reception and customer service</td>
<td>178</td>
<td>6,77</td>
<td>7</td>
<td>7</td>
<td>53</td>
<td>1</td>
<td>9</td>
<td>6</td>
<td>8</td>
<td>1,62</td>
<td>23,91</td>
</tr>
<tr>
<td>Access to additional services</td>
<td>178</td>
<td>5,67</td>
<td>6</td>
<td>6</td>
<td>42</td>
<td>1</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>1,82</td>
<td>32,08</td>
</tr>
<tr>
<td>Attractive product/goods price</td>
<td>178</td>
<td>7,12</td>
<td>8</td>
<td>8</td>
<td>46</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td>1,71</td>
<td>23,95</td>
</tr>
<tr>
<td>Individual approach to the customer</td>
<td>178</td>
<td>6,69</td>
<td>7</td>
<td>9</td>
<td>40</td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td>1,90</td>
<td>28,36</td>
</tr>
<tr>
<td>Convenient location of the enterprise</td>
<td>178</td>
<td>4,20</td>
<td>4</td>
<td>3</td>
<td>39</td>
<td>1</td>
<td>9</td>
<td>3</td>
<td>6</td>
<td>2,02</td>
<td>48,06</td>
</tr>
<tr>
<td>Reputation of the company</td>
<td>178</td>
<td>5,49</td>
<td>6</td>
<td>6</td>
<td>36</td>
<td>2</td>
<td>9</td>
<td>4</td>
<td>7</td>
<td>2,19</td>
<td>39,94</td>
</tr>
<tr>
<td>Other</td>
<td>178</td>
<td>2,44</td>
<td>1</td>
<td>1</td>
<td>102</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>2,04</td>
<td>83,44</td>
</tr>
</tbody>
</table>

Symbols: N – abundance, M – mean, Me – median, Mo – modal, NMo – modal abundance, Min – minimum value, Max – maximum value, Q1 – first quartile, Q3 – third quartile, Std.dev. – standard deviation, Vz – coefficient of variation

Source: own study.

Among the most important factors influencing a customer's repeat purchase of products or goods were the high quality of the product or goods (average rating of 7.94), the attractive price of the product or goods (average rating of 7.12), and the competence and
knowledge of the staff (average rating of 6.81). The factors ranked in order of the average rating they received are shown in Figure 2.

![Figure 2. Average rating of the degree of influence of a factor on a customer's repeat purchase of a company's products or goods](image)

Factors that did not receive a rating lower than 3 were the high quality of the product or commodity and the competence and knowledge of the staff. All of the factors mentioned in the question received a score of 9 at least once (each factor, was considered the most important by at least one respondent). Most often, respondents considered the high quality of the product or goods as the most important factor (72 indications), as well as the individual approach to the customer (40 indications). The lowest value of coefficient of variation (15.57%) and standard deviation (1.24) has the high quality of the product or commodity, this means that when indicating the rating for this factor, respondents were most unanimous and mainly attributed to it a strong influence on whether the customer will purchase the product or commodity again.

Next, it was examined whether what factors, influencing a customer's repeat purchase of a product or commodity, were indicated by the respondents were influenced by the respondent's employee group or length of service and the type or size of the company. The
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results of Pearson's chi-square test and Spearman's rank correlation analysis are included in Table 5.

Table 5. Degree of influence of given factors on the customer's repeat purchase of the company's products or goods vs. selected characteristics from the metric. Results of Pearson's chi-square test and Spearman's rank correlation analysis

<table>
<thead>
<tr>
<th>Specification</th>
<th>Business type</th>
<th>Business size</th>
<th>Employee group</th>
<th>Internship work</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High quality product/goods</td>
<td>0.1316</td>
<td>0.2125</td>
<td>0.1614</td>
<td>0.2460</td>
</tr>
<tr>
<td>Staff competence and knowledge</td>
<td>0.1664</td>
<td></td>
<td>0.2603*</td>
<td>0.0316*</td>
</tr>
<tr>
<td>Reception and customer service</td>
<td>0.1642</td>
<td>0.0003***</td>
<td>0.3435</td>
<td>0.0131*</td>
</tr>
<tr>
<td>Access to additional services</td>
<td>0.3442</td>
<td>0.0029**</td>
<td>0.5219</td>
<td>0.8900</td>
</tr>
<tr>
<td>Attractive product/goods price</td>
<td>0.2672</td>
<td>0.0184*</td>
<td>0.1146</td>
<td>0.2410</td>
</tr>
<tr>
<td>Individual approach to the customer</td>
<td>0.0208</td>
<td>0.1935</td>
<td>0.0583</td>
<td>0.0285*</td>
</tr>
<tr>
<td>Convenient location of the enterprise</td>
<td>0.0349*</td>
<td>0.0393*</td>
<td>0.3946</td>
<td>0.0176*</td>
</tr>
<tr>
<td>Company reputation</td>
<td>0.0001***</td>
<td>0.0000***</td>
<td>0.0341*</td>
<td>0.0030*</td>
</tr>
</tbody>
</table>

Source: own study.

Service enterprises rated the convenient location much higher (average 4.65) than manufacturing enterprises (average 3.94) or trade enterprises (average 3.88). This is understandable, since services must be provided by employees in person, while in trade or manufacturing enterprises there are much more opportunities to transport products or goods. The company's reputation was also rated highest in service enterprises (average score of 6.21).

The size of the enterprise influenced the evaluation of the competence and knowledge of the staff (p<α, p=0.0025), reception and customer service (p<α, p=0.0102), access to additional services (p<α, p=0.0029), attractiveness of the price of the product, goods, (p<α, p=0.0184), convenient location of the enterprise (p<α, p=0.0393) and reputation of the enterprise (p<α, p=0.0000).

The respondent's employee group affiliation had little effect on the rating of factors influencing the customer's repeat purchase of the product. Those working in the accounting or similar department rated the company's reputation the highest (average rating of 5.77), and other employee groups rated it the lowest (average rating of 4.41).

Correlation analysis showed that a significant relationship occurred between seniority and ratings of staff competence and knowledge (p<α, p=0.0316), reception and customer service (p<α, p=0.0131), personalized approach to customers (p<α, p=0.0285), convenient business location (p<α, p=0.0176) and business reputation (p<α, p=0.0031). All coefficients are statistically significant, but the strength of the relationship is not high, ranging from 0.16 to 0.22.
The results obtained in this part of the study confirm T2.

Analyzing the obtained results of the research, it should be concluded that both managers and employees of enterprises are aware of the importance of customer relations for the success of business operations. They are also aware of the main factors determining the creation of customer value, which is crucial to the ability to establish and maintain profitable relationships with customers.

Respondents were also asked whether they thought it was worthwhile to measure the profitability of customer relationships, and if so, whether any form of such analysis is done at their companies. The results of such questions are shown in Figures 3 and 4.

![Figure 3](image3.png)

Figure 3. Response statistics for the question: Is it worthwhile to study the profitability of customer relationships?
Source: own study

![Figure 4](image4.png)

Figure 4. Response statistics for the question: Do you measure the profitability of your customer relationships?
Source: own study

Although the majority of respondents believe it is worthwhile to study customer profitability, only 48% said they measure the profitability of their customers. Among the ways to measure customer profitability, respondents cited revenue and cost analyses, margins, value and purchase frequency, among others. The lack of measurement of customer profitability in enterprises is a negative phenomenon, which may be due to insufficient knowledge of how to measure such profitability or ineffective management of the entity. By measuring such profitability, companies would gain additional information about customers that could influence the building of relationships with them.
The results of this part of the survey help to partially confirm T3. Respondents are indeed aware of the need to determine and analyze the profitability of customer relationships, however, less than half of the companies where they work do such analyses.

This is a reason to conduct further research looking for management accounting methods that would effectively support managers in their ability to determine the profitability of customer relationships (Bochenek, 2019; Bochenek, 2023, Kubacka, 2020).

5. CUSTOMER COST ACCOUNTING MODEL

A basic concept that has the potential to support managers in making decisions that shape profitable customer relationships is dedicated customer costing (Lew, Pacana, Kulpa, 2017). Deductive research, which at its core is theoretical in nature, uses modeling, among other things. Modeling and models are a basic tool of scientific cognition (Flejterski, 2007). Modeling is a way of abstracting, leading to the representation in the abstract of the essential features of the reality under study (Gomolka, 2000). The product of modeling is a model, which is an approximation of a certain slice of the real sphere, used to explain and understand it, to study it more closely, and to interpret it. M. Smith (2014) lists inference on the basis of model building as one of the basic research methods in management accounting.

Thus, the customer cost accounting model is a simplification of reality, constructed in order to understand the account and be able to design it in practice. The implementation of such a model in a specific enterprise additionally implies the need to take into account the information expectations of the managers managing it, the state of its environment and many other situational factors. Therefore, the presented model of customer cost accounting is descriptive in nature.

The general model of customer cost accounting in its universal form (Lew, 2015; Lew, 2016), which can be detailed to fit the specific needs of individual companies, and its place in the customer relationship scorecard is shown in Figure 5.

![Figure 5. The general model of customer cost accounting and its place in the customer profit and loss account.](image)

Source: own study.
In general terms, customer cost accounting includes four essential, interrelated components:

1. **Identification** – of cost objects and activities belonging to them that cause costs in customer relations.
2. **Measurement** – the method used to determine the value of individual customer relationship costs.
3. **Valuation** – determining the value of individual customer relationship costs.
4. **Presentation** – communication, in the content and form desired by managers, of cost information on customer relations.

These four elements are the starting point for building dedicated customer cost accounts for individual enterprises. Customer cost accounting in its construction should take into account the size of the enterprise, intellectual resources, business environment, capital resources and management needs of the individual enterprises interested in this account.

6. **DISCUSSION AND CONCLUSIONS**

Customer cost accounting should also support managers in identifying value-creating and non-value-creating activities for customers. Proper identification of activities that create value for customers will determine their use in building profitable customer relationships. In turn, identifying activities that do not create value for customers will allow them to be eliminated or reduced.

A value-creating activity is one that increases the value of the commercial service to the customer or is essential to the operation of the business. Value for the customer is perceived by them as a set of desirable characteristics that a commercial service should have. The basic component of this service is the goods in which these customers are interested. The basic characteristics of a commercial service that can potentially create value for the customer include: quality of the offer and/or goods, availability, reliability, price.

These features in various configurations can be enhanced or muted in a way that ensures that the needs of individual customers are met. The products offered by companies, together with accompanying services, should create an offering that maximizes the effect of value for the customer, while maintaining an acceptable level of cost for these services.

In identifying activities that create value for the customer, the problem is to estimate the value that customers ascribe to the commercial service. Value for the customer can be defined as the buyer's willingness to pay a given amount for the goods offered to him by the trading company, together with the services accompanying them. This definition of value implies the two-sidedness of the relationship between the enterprise and the customer, and that the value to the customer is the difference between the benefits he received and the price he had to pay for it.

Customer value-creating activities, therefore, are those that significantly affect a customer's perception of a commercial service, and in particular relate to its quality and usefulness.

Activities that do not create customer value are those that consume time inefficiently, unnecessarily increase resource consumption, do not result in increased customer satisfaction, and do not increase the value of goods or commercial service in the eyes of customers.

Of course, value-creating activities should be considered not only in terms of the costs they generate, but primarily in terms of the revenues they generate. With this reasoning, it
should be assumed that the performance of value-creating activities for the customer contributes to an increase in the financial result realized from sales. It should be assumed that value-creating activities increase customer satisfaction. Then, activities that do not contribute to an increase in the bottom line, for example, in the situation of generating costs without increasing revenues should be considered as not creating value.

Customer relationships in the accounting framework are presented primarily as relationships of a transactional nature. This approach is evident not only in the financial accounting literature (Hendriksen, van Breda, 2002; Czubakowska, Gabrusewicz, Nowak, 2009; Świderska, Więcław, 2006), but also in management accounting (Piosik, 2006; Dobija, Kucharzyk, 2009). The concept of customer relations has gained a broader meaning in marketing publications (Otto, 2004; Mitrega, 2008; Dembińska-Cyran, Holub-Iwan, Perenc, 2004; Nowak, 2007).

Today, the view of customer relations goes far beyond the transactional view. Relationships with customers are seen as the totality of relationships linking a company and its customers. According to T. Sztucki (1998), the concept of customer relations is a concept of management and operation in the market, according to which the market effectiveness of companies depends on the establishment of partnership relations with market participants. This concept involves building loyalty relationships with customers and strategic alliances with business partners.

From an accounting perspective, it is significant that the modern view of customer relationships assumes that they are multilateral (Bochenek, 2022). Relationships with individual customers are not limited to single transactions, but to the whole series of them occurring during the entire life cycle of a customer in an enterprise. Relationships with customers develop not only as a result of actions taken in various functional areas of the business of trading enterprises, but also as a result of actions taken by customers themselves. In addition to customers, these actions are influenced by the rest of the enterprise's environment, among others: competitors, potential customers, local communities, the media, legal regulations, environmental aspects.

The complexity of customer relations, despite their multifaceted nature, can be put into three perspectives of the management analyses carried out. These include:

- the concept of customer perceived value (CPV),
- the concept of customer lifetime value \( \text{CLV} \),
- the concept of co-creation of value by a commercial enterprise and a customer operating in a specific environment.

This finding sets the next directions for research, which, according to the authors, should focus on building competencies that enable proper identification of customer costs and any activities that bring value to customers.

REFERENCES


