

## The concept of customer cost accounting

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### Keywords

Cost accounting, customer, management accounting

### Abstract

*The aim of this article is to present partial results of a conducted survey on the needs of the application of customer cost accounting and to provide a definition and concept of the general model of customer cost accounting. Customer cost accounting is a tool of management accounting, which task is to help managers in managing customer relationships. Optimization of these relationships is to be realized thanks to correct determination of profitability of those relationships, and properly run customer cost accounting is required to determine the profitability of those relationships.*

### 1. Definition of customer cost accounting

The concept of customer cost accounting is a new concept which so far has not been encountered in the literature of the subject. This article is the first that addresses this issue. For this reason analysis of the concept in the literature cannot be performed. In practice of business activity and scientific studies one can come across a classification of customers in terms of profitability. In order to determine the profitability of customers one should subtract from revenues achieved thanks to given customers the costs of those customers. However, customer cost accounting is not carried out.

Cost accounting is "all the activities aimed at determining the amount of living and objectified labour, incurred in the company at a specified time and with a specified purpose" (Matuszewicz 1994, Nowak 2011) or cost accounting is defined as a measurement and supply of financial and other information relating to resource acquisition and consumption, it provides information both for the purposes of financial accounting and management accounting (Horngren, Bhima, Foster, Datar 1999; Horngren, Datar, Foster 2006; Cima 2005). Cost accounting provides information needed for planning and control activities and in economic decision-making (Garrison 1991) and is a quantitative description of economic events (Mattessich 1964). Costing should be subordinated to the strategy (Lucey 2003).

From these definitions, it follows that the cost accounting model defines the aim, subject and object of this accounting. In customer cost accounting it can be concluded that:

- purpose of running it is to provide management with useful in decision-making information on the costs associated with customer relationships and ultimately enable to determine the profitability of those relationships,
- object of measurement are the customer or a customer segment costs,
- entity in which the measurement is taken is a trade company running this cost accounting.

Therefore, customer cost accounting must be defined as the process of identification, classification, measurement, evaluation, collection, accounting (calculating), analysis and presentation of the costs of establishing, maintaining and conducting customer relationships and the use of resources to handle these relationships in a manner which enables to recognize cumulative cost of the customer or customer segment.

Customer cost accounting is a base to determine the profitability of customers or their segments. In order to determine the profitability of customers, identification and analysis of the revenues achieved thanks to these customers should be carried out with the same precision

regarding customers or their segments as it is used to identify the costs. This will allow the determination of the financial result in cross-section of customers, and suitable design of the income statement will enable to trace the impact of the cost objects on the overall profitability of individual customers.

Customer cost accounting should therefore include in its scope all the company's activities, so that to support managers in their decision-making in a comprehensive manner. Cost accounting is a separate objectively and procedurally enterprise information system. Customer cost accounting is a uniform set of information on the customer cost developed according to a specific model tailored to the needs of specific users in a given commercial enterprise.

The aim of this article is to present partial results of the study and to present a concept of a general model of customer cost accounting and its definition.

## **2. Model of customer cost accounting**

The main risk (Sołtysiak 2014) of conducting economic activity is the risk associated with profitable sales of effects of activity of a given company. The risk is related on one hand to the fact of a possibility of making a sale. On the other hand, with the possibility of profitable sales. However, this risk can be limited, and the relationship between costs and revenues can be optimized, but to be able to do this one need to have the right tools. Cost accounting is the main tool for this optimization.

Deductive studies, which in their essence have a theoretical nature use modelling, among other things. Modelling and models are the main tool of scientific knowledge (Flejterski 2007). Modelling is a way of abstraction, leading to an abstract mapping of the essential features of the studied reality (Gomółka 2000). The outcome of the modelling is a model that is an approximation of a particular segment of the reality, and is used for the explanation and understanding, getting to know better and interpretation of that segment. The model can also be understood as an object manifesting resemblance to something and serving, through the use of simplification, the publication of essential features of some phenomenon (Nowak 2007). In science, models are used to collect and pass on knowledge about different aspects of reality. They are used to reveal the reality and as instruments to explain the past and the present, as well as to predict the future and the influence it (Nita 2009). In science model therefore represents one statement or set of statements about reality. These statements may refer to the facts, have a nature of rights or be theoretical concepts (Ackoff 1969). M. Smith (Smith 2014) mentions reasoning on the basis of model building as one of the basic research methods in management accounting.

Model of customer cost accounting is therefore a simplification of reality, constructed in order to understand this accounting and to be able to design it in practice. In the case of customer cost accounting in companies it has a vital significance because of necessity of designing this accounting with taking specific characteristics of these enterprises into consideration. An implementation of such a model in a particular enterprise implies also the need to take into account the informational expectations of its managers, the state of its environment and many other situational factors. Therefore, the presented model of customer cost accounting is descriptive, and its goal is to present the content and method of presentation of information on the customer costs.

The basis for the development of a new model (models) of customer cost accounting is a meta-model defining the overall arrangement, in which through a proper measurement the economic situation of a company is mapped. The meta-model should define a framework for the creation of general models of customer cost accounting which have to ensure a comprehensive, coherent and universal system for presentation of information creating a reliable picture of the state of relations with customers from the cost side, drawn up in such a way as to meet the expectations of management in the company. These models may contain rules according to which this model can be adapted to the specifics of a particular company. Compiled and analysed on the basis of management and accounting theory general models of customer cost accounting are the basis for individualized solutions used in the practice of economic activity of companies.

The general model of customer cost accounting in a universal form, which can be refined in order to fit the specific needs of individual companies and its place in the customer relationship results accounting is presented in Fig. 1.

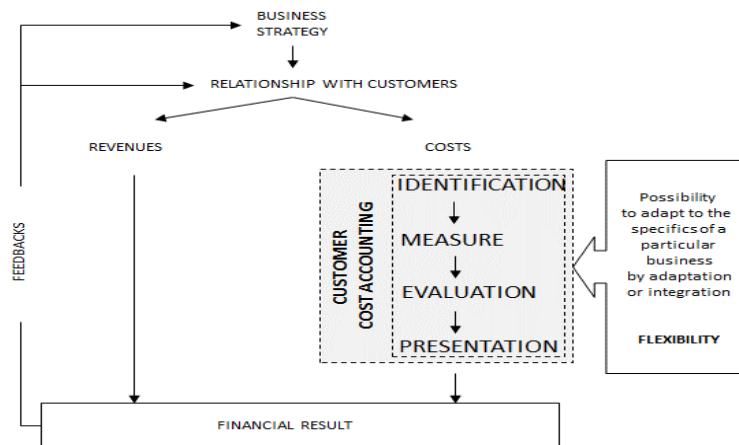


Fig. 1. A general model of customer cost accounting and its place in customer result accounting.

Source: own.

In general, customer cost accounting includes four essential, interrelated elements:

1. Identification - cost objects and activities belonging to them causing the formation of the cost of customer relations.
2. Measurement - the method used to determine the cost of each customer relationship.
3. Evaluation - determination of the individual costs of customer relations.
4. Presentation - communication, using desired by managers content and form, cost information relating to customer relations.

All these elements of customer cost accounting are the basis of customer cost management in the context of financial result in the companies.

The model of cost accounting should be adapted to the type of company that intends to implement it. The main factor differentiating the type of model is the size of the company. The size of the company will determine, among other things, the financial capabilities that the company will be able to spend on implementing and running the customer cost accounting. In small companies it will be reasonable to implement customer cost accounting based on traditional cost accounting used for reporting purposes. It should be properly adjusted and expanded. Medium-sized companies can deploy customer cost accounting which is using customer life cycle. For large companies probably the best way to implement customer cost accounting will be the integration of the account with other methods of management accounting such as balanced scorecard, activity based costing, cost budgeting, and target costing.

### 3. Survey methodology

In order to verify the needs of companies in the field of description of model of customer cost accounting survey has been carried out. Empirical data was collected in the form of an anonymous survey, which was conducted among companies operating in the south-eastern Poland. The main criterion for selection was the need of accounting records being conducted by these companies on the basis of the Accounting Act (Act... 2013). Survey forms were sent to the persons responsible for the functioning of management accounting in the surveyed companies, and in the absence of such persons, the form was filled in by the managing or financial directors or chief accountants. Forms were sent out in 2014 to 208 companies.

The study involved 78 companies, but significant errors in the completed survey forms resulted in the need to eliminate 7 forms from the analysis. The percentage of returned survey forms is 37.5%. However, only 34.13% of the forms distributed to companies were subject to analysis.

The design of the survey form was dictated by the objective of the survey that is to verify the status and needs of the application of customer cost accounting in companies. While designing the survey, the limited time that entrepreneurs are willing to spend to fill out and return the survey form was taken into account. The survey form consisted of 21 content-related closed or classifying questions and 3 concerning the basic characteristics of the surveyed companies. This paper will present selected results of the study substantively related to the subject of the article (for more information: Lew 2015).

The applied research approach has a positivist character, and is based primarily on quantitative analysis. The choice of methods used was determined by the nature of the data collected. Applied methods concerned in particular:

- analysis of the relationships between variables regarding the usefulness of customer cost accounting and the need for its use,
- analysis of the type of economic activity and the intention to introduce customer cost accounting,
- grouping some solutions that companies use or wish to use, and are associated with the customer cost accounting.

This article is the first in a series, in which models of customer cost accounting tailored to companies of varying size and type of business activity will be more widely presented.

#### 4. Survey results - partial

Companies surveyed belong to groups of small enterprises (23%) and medium (66%), the rest of the units surveyed are classified as large (10%), there is also one to be classified as a microunit.

With regard to the nature of the economic activity structure of the surveyed companies is presented in Table 1.

Table 1. Number and structure of surveyed units

The number and structure of respondents on account of the dominant nature of the economic activity	Number	Structure
production companies	19	27%
service companies	18	25%
trade companies	27	38%
selected more than 1 type of economic activity	7	10%
<b>Total</b>	<b>71</b>	<b>100%</b>

Source: own.

Companies that have marked more than one dominant nature of the economic activity have indicated as one of the two activities, an activity of a commercial nature.

During the study, the author had an opportunity to conduct interviews with decision makers and people filling the questionnaire, whose aim was to clarify the concept of customer cost accounting. Many respondents needed to define a concept of the customer cost accounting to be able to answer the questions in the questionnaire. The conclusion of the talks is determination of relatively poor knowledge of issues related to management accounting, and in particular the concept of customer cost accounting, which in this case is justified by the lack of such a concept in the theory of management, and in particular in accounting. Answers to the most important, because of the range of tests run, question of the survey gave an analysis of questions 2 and 21. Statistics for the answers to these questions are provided by summaries presented in Tables 2, 3.

Table 2. Number of businesses using customer cost accounting

Does your company use customer cost accounting?	Answers	
	yes	no
production companies	42%	58%
service companies	28%	72%
trade companies	4%	96%
<b>Total</b>	<b>24%</b>	<b>76%</b>

Source: own.

The results obtained on the basis of the analysis of the answers to question 2 of the survey indicate varying degrees of customer cost accounting usage by the surveyed companies. The most positive responses to this question have given companies with production activities (42%). One could search for connections between the possibility of using customer cost accounting and size of the business, but after analysis it is clear that there is no such connection. Each company can implement and run customer cost accounting, however, a method which will be used for construction of a dedicated customer cost accounting must be adapted to the possibilities (size) of a given company. In this situation, it may be presumed that the main reason for such a structure of answer to that question (Question 2) could be sales awareness of respondents resulting from barriers to entry into the industry. To run a production company, an individual must typically incur far greater investment outlays at the start of activity and bear significantly higher risk related to the potential lack of demand for products produced by it. In commercial enterprises barrier to entry into the industry is much lower, and commercial enterprises can easily diversify their assortment risk, offering a variety of products from different manufacturers. With these considerations one can state that greater sales risk, which the production companies incur, encourages them to conduct a more detailed analysis of customer relations.

Structure of answers to the basic question in the survey is presented in Table 3.

Table 3. Plans of implementing customer cost accounting in surveyed enterprises

If you do not use customer cost accounting, whether you intend to implement such a system in the future?	Answers	
	yes	no
production companies	55%	45%
service companies	15%	85%
trade companies	81%	19%
<b>Total</b>	<b>59%</b>	<b>41%</b>

Source: own.

Analysing the answer to question 21, it can be stated that in comparison with question 2, virtually all production and trade companies are, in the end, going to have a customer cost accounting. The largest information gap between the information needs regarding relationships with customers and run customer cost accounting exists among trade companies. Only 4% of respondents from this group of companies state that they run customer cost accounting. Also, 81% of companies are planning to implement customer cost accounting in the future.

The results of these studies indicate that interest in customer cost accounting is quite common, so scientific discussions on possible models of customer cost accounting should be conducted.

## 5. Conclusions

Maintaining profitable relationships with customers is a prerequisite to the continued economic activity and its development. One of the two main elements affecting the profitability of customer relationships are the costs of these relationships. Costs understood as cumulative value of all actions taken in the company in order to establish and maintain a relationship with given

customer. Suitable customer cost accounting is a tool to properly identify, measure, evaluate and present the customer cost. Customer cost accounting will allow to determine the actual profitability of a given customer, which in turn will allow for optimization of activities carried out in relation to this client. Understanding the true profitability of individual customers enables development of relationships with profitable customers and the termination of relationship with unprofitable customers. It is important because maintaining relationships with unprofitable customers is at the expense of profitable customers, thus reducing the potential profits that the company could achieve. Customer cost accounting supports business strategy aimed at developing customer relationships in the long term.

Further studies should be conducted on the types of target models of customer cost accounting, which could be used in different types of companies. Research concerning the relationship between the size of companies and customer cost accounting possible to implement or concerning the relationship between the type of the conducted business activity and the customer cost accounting is particularly noteworthy. Perhaps another kind of customer cost accounting would be appropriate for companies selling goods via the Internet and another for shopping malls.

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