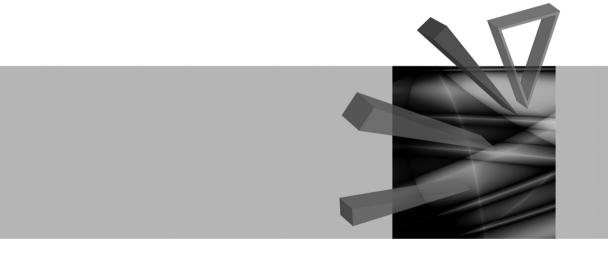
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# Local Economy in Theory and Practice Planning and Evaluation Aspects



edited by Ryszard Brol Andrzej Sztando



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Local Economy in Theory and Practice Planning and Evaluation Aspects

ISSN 1899-3192

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## TARGET COSTING AS AN INSTRUMENT TO ENSURE EFFICIENT FULFILLMENT OF PUBLIC NEEDS AT LOCAL GOVERNMENT UNITS

**Summary:** The current environment of LGU functioning requires seeking new solutions to rationalize the costs of their operations. Facilitation activities implemented in these organizations should therefore be targeted at seeking, adapting and utilizing the instruments which guarantee success in this area of their activity. Among such solutions, there are costing schemes which have already proved successful in the activities of commercial organizations – activity-based costing and target costing. The latter, in particular, will ensure the operating efficiency of LGUs through targeting the needs of these organizations' stakeholders.

Keywords: local government units, public needs, target costing, budgeting.

### 1. Introduction

The contemporary operating conditions of the local government subsector lead to processes of reassessment of the view on public organizations. The commonly occurring phenomenon of the high rate of growth of a number of local governments, characterized by current expenses exceeding the capacities of these organizations, is the reason for seeking solutions to professionalize the economic aspects of the operations of local government units (LGU). One of the postulated methods of proceeding in this field is to use instruments adapted from commercial service organizations, targeted at recognizing and effectively fulfilling their customers' needs, which is realized, among others, through the identification and evaluation of the costs of the public services offered.

The purpose of this paper is an attempt at presenting a model illustrating the utilization of target costing in the process of budgeting with due account of stakeholders' needs.

The paper employs selected contemporary concepts of management in public organizations, target costing in enterprises and options of its implementation in public sector bodies. The discussion is complemented by a schematic visualization of the proposed budgeting processes routing.

#### 2. Contemporary concepts of costing at local government units

Costs constitute the intentional consumption of fixed assets, materials, fuel and energy, services, working time and certain other expenses not corresponding to the consumption of production factors, expressed in acquisition prices (on a value basis), sustained in relation to an entity's ordinary activities within a specified time, yielding a result of a useful product or service [Kożuch, Kożuch, Wakuła 2007, p. 197]. Due to their characteristics, they should be subject to continuous control and evaluation within the framework of the business activity. The process aimed at determining the costs of activities, consisting in measuring the value of consumption of the organization's resources, is defined as costing [Nowak 2003, p. 15].

Contemporarily, costing is treated as a process involving research and the processing of corporate cost information utilized by users to evaluate the situation, take business decisions and verify their implementation [Walczak, Kowalczyk 2010, p. 137]. This leads to the conclusion that costing is more than a part of general accounting, as it incorporates planning, recording, calculation and the analysis of costs. This is a field of accounting that provides multisectional information offering knowledge about the levels of [Jaruga et al. 1992, p. 12]:

- ex post costs: for costing targeted at information/control,
- *ex ante* costs (also referred to as *a priori* costs): for costing targeted at information/ control/decision-making.

The core of costing in the *ex post* perspective emerges from the assumption that there is only one true cost that was incurred in manufacturing a specific production volume and cannot be varied any more – as such, this cost is the basis for determining the price. In the *ex ante* concept, it is assumed that different costs occur for different purposes, to be determined by the decision-makers.

In a broader interpretation, covering both the presented time perspectives, one may thus assume that costing in economic organizations performs the following functions [Jaruga 1986, pp. 43–44]:

1) serves the purpose of controlling the economy of activities,

2) is the basis for calculating sales prices,

3) serves the purpose of taking business decisions related to production planning,

4) allows for determining the bottom line and valuate inventories,

5) allows for determining the efficiency of production solution variants,

6) allows for the observation and analysis of structural changes in the organization during its development.

The above specified functions may also be performed in the activities of local government units, where it is necessary to take into account the unique characteristics

of the sector represented by these organizations. This specifically involves the process of price determination, which in the local government subsector can be identified with the process of determining the costs of producing specific services – no profit for the organization producing the service is expected here. The purpose of this process is to answer the question of whether this value is suitable for the cooperating partners, acceptable for the local community, and its relationship to the market price of purchasing the same services from other organizations, including commercial organizations. A socially acceptable value in this accounting process is such value of public funds which can be allocated to the performance of specific services, with the assumption of the voluntary giving-up by the community of alternative ways to manage these resources [Kożuch 2012].

The price thus determined may exceed the market prices applicable to purchases of the same services from other public and non-public units of the organization (e.g. educational services, health care services, etc.), which is due to the public character and unique objectives of public organizations, the need to maintain the manufacturing potential and to maintain continuity of service supply, without the risk of increasing their prices in cases of full dependency on third parties.

Contemporary costing theories are typically presented in two different perspectives, which arise from the diversity of the environments in which they have formed and developed. Thus, there is a distinction between activity based costing, which presents the approach preferred in the USA, and target costing, a product of Japanese corporations managers' work.

Activity based costing (ABC) is a method of measuring the costs and efficiency of activities, resources, products, customers and other cost objects, with resources linked to activities and activities linked to other cost objects on the basis of the degree of utilization of activities and knowledge of cause-and-effect relationships between cost generating factors and activities [Kożuch 2012]. This is a system proving the quality of work of the organization's managers, which enables answering multiple recurring questions in economic processes, such as [Kaplan, Cooper 2002, p. 109]:

- What activities are the organization's resources used for?
- How costly are these activities and all the associated business processes?
- Why does the organization have to pursue the specific actions and processes?
- What proportion of each activity is related to the products, services and customers of the organization?

The adaptation and implementation of activity-based costing in local government units therefore answers the increasing need to reduce the costs of activities without necessarily decreasing the quality of services. This is a particularly important feature of this approach, which accounts for the demand reported by potential stakeholders in the cost calculation process.

This latter feature of activity-based costing is particularly strongly emphasized by the other of the proposed systems which allow generating information about the value of consumed resources in the organization – target costing. In general terms, this is understood as a set of cost planning, controlling and management tools from the point of product and manufacturing processes design, so that the early enough determination of the cost structure accounts for the customers' – stakeholders' requirements [Nowak 2006, p. 87]. The goal of implementing this solution in business organizations is to achieve the present level of manufacturing costs [Tanaka 1993, p. 3], which gives the option to determine the costs scheduled or considered standard for the specific services, activities and tasks performed within the organization's budget during the budgeting process. Obviously, due to the characteristics and operating conditions of the organizations, the practical target costing scheme often varies in terms of detailed arrangements; however, it exhibits several fixed characteristics: [Ansari, Bell 1997, pp. 10–11]

- it accounts for the customers' needs and preferences,
- it focuses on the product planning and designing phase,
- it requires the cooperation of all employees,
- it considers costs throughout the entire product life cycle,
- it creates a chain of value.

In target costing adapted to the customer's philosophy (market-in), product costs are therefore a variable belonging to two scheduled categories: sale price, and expected profit margin. Due to the characteristics of public organizations' functioning, this relationship should answer the question of what a production cost can or should be for the organization to fulfill the stakeholders' needs to the greatest possible extent, while at the same time ensuring a sufficiently low level of costs throughout the life cycle of the public services offered [Kożuch 2012].

It may be inferred from an evaluation of the discussion, that a properly constructed management process in local government units should account for both of the above presented concepts simultaneously. The utilization of ABC costing and complementing it with target costing arrangements, particularly in the field guaranteeing the high level of fulfillment of stakeholders' needs, is an element which visibly facilitates the budgeting process and consequently the increasing efficiency of the local government subsector organizations.

## 3. Target costing in LGU budgeting process – theoretical reference model

A key problem faced by both theoretical analysts and practical performers in the field of adaptation and implementation of various budgeting concepts in LGUs, is the issue of determining budget values on the basis of the local communities' needs and establishing the results or consequences of actions. Actions to facilitate LGU operations should therefore postulate the implementation of such planning methods which guarantee the fulfillment of needs reported by stakeholders, while at the same time pursuing the goal of rationalizing the costs of activities. It should be expressly

stated here that cost rationalization in the public sector cannot be the most important selection criterion.

One of the available solutions is activity-based budgeting, which is a combination of the budgeting system and the activity-based costing scheme in place. Such a budgeting process is a reversal of ABC costing. In an LGU, it starts with determining the cost objects (services and customers whose needs are to be fulfilled). Then, the necessary activities are identified and accounted for, using cost carriers. Finally, the resources required with the given level of technology are established, and the valuation and analysis of their consumption leads to the specification of expenses necessary to be incurred in the given budget year [Kożuch 2012]. These steps should be taken within the scope of requirements analysis, cost analysis and production capacity analysis.

In order to ensure the appropriate level of fulfillment of LGU stakeholders' needs, the ABB budgeting process must be complemented with target costing solutions. This is justified, among other items, by noticing that with a significant level of variation of activities, increasing competitiveness and growing pressure on the effective utilization of the organization's resources, it is not possible to operate properly using only a single costing system [Kaplan 1988, pp. 61–66].

The implementation of target costing arrangements is a foundation of recognition and planning the internal resources' consumption structure, according to the public service production technology which is achievable or available, while at the same time guaranteeing conformity of the qualities and functions of the rendered services with stakeholders' needs. It may therefore be concluded that this arrangement is a prerequisite for achieving a high level of LGU efficiency, particularly when contemporary literature on the subject recognizes activity-based costing and target costing concepts to be components of new management accounting paradigms [Ferrara 1995, pp. 3–8].

The assurance of compliance of the qualities and functions of public services with stakeholders' requirements depends on the choice of method of dividing product costs. Two basic ways to divide the target cost of a product are distinguished (applicable only to the manufacturing phase) [Prewysz-Kwinto 2010, pp. 87–100]:

1) organic method, where the division is made from the viewpoint of engineers and product designers,

2) functional method, where the division is made from the viewpoint of future buyers.

With an evaluation of the solutions proposed in the above specified methods, the organic methodology should be used for budgeting in the public sector, as it guarantees a higher level of satisfying the stakeholders' needs, thus defining the operating efficiency of organizations, including local government units.

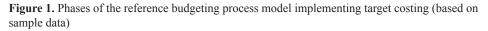
With the adaptation of target costing, the procedure of cost determination begins with setting the sale price which stakeholders are able and willing to "pay" for a product having certain utility features (target price). This takes place in accordance with the concepts described above; at the same time, because public sector entities are not appointed to generate profit, the value of the target price corresponds to the value of the service costs which can be incurred in the given circumstances.

The calculation of target cost value should be complemented with a knowledge of the stakeholders' expectations and requirements. In the current operating environment of economic organizations, operating efficiency can be referred to only if they produce and supply useful products to their buyers. Focusing on needs is, therefore, an indispensable area that should be considered in the budgeting process. Only such products which satisfy needs serve the purpose of fulfilling the organization's goals, while at the same time guaranteeing the efficiency and effectiveness of activities.

The identification of contemporary public sector organization management study gives the opportunity to determine the three phases of the reference budgeting process model using target costing schemes in LGUs (see Figure 1).

Service	Quality or function importance		Target quality or function cost	
qualities and functions	in scale	%	<u> </u>	
A	<u>2.8</u>	<u>20.0</u>	$500 \ge 20\% = 100$	
В	4.2	30.0	150.00	
С	1.4	10.0	50.00	
D	2.1	15.0	75.00	
E	3.5	25.0	125.00	
Total	14	160.0	500.00	

Service qualities and functions		Components				Target quality or function cost
	x <sub>1</sub>	x <sub>2</sub>	X3	X4	X5	function cost
А	0.5x 100=50	0.3x100=30	0.2 x 100 = 20		/	100.00
В			0.2 x 150 = 30		0.8 x 150 = 120	150.00
С				1 x 50 = 50		50.00
D		0.6x75=45		0.4 x 75 = 30		75.00
Е	0.1x125=12.5	0.3x125=37.5			0.6 x 125 = 75	125.00
Target cost of component	62.5	112.5	50	80	195	500.00



Source: own elaboration.

Phase I includes the identification of stakeholders' needs and expectations. Thus, it partially corresponds to the process of "recognizing and estimating the quantity and quality of public services necessary for achieving the unit's goal, which are required in the future operating conditions of the unit", as identified within the framework of ABB budgeting. This phase also includes the determination of the price which stakeholders are willing to pay, and the qualities of the services they are interested in.

Within Phase I, it is also necessary to identify the importance (according to the scale fitted to the needs of research carried out in the given unit) of the particular qualities and functions covered by the budget. This ranking is a prerequisite for focusing on those areas of activity of local government units which are significant from the viewpoint of their primary goal.

Another important issue for the quality of the budgeting process, is the first correction of validity of the qualities and functions arising from the needs evaluation within the first phase by the responsible persons – officers of the given organization. This is necessary for the key product functions which will not be identified or will not be highly valued by the citizen but are, for example, required by law.

Phase II of the budgeting process based on target costing serves the purpose of determining the costs of qualities and functions of services performed in the given LGU. This is calculated as the product of the "price", being the indicator of acceptable (target) cost allocated to the given service, multiplied by the importance of the quality or function reported by citizens within the first phase.

Phase III of the budgeting process serves the purpose of determining the costs of performance of specific services, divided into the costs of resources or components of these services. The achievement of this phase requires the involvement of persons directly employed in the activities related to the performance of the particular services. Their goal is to determine which components, and to what extent, guarantee the given quality of service or serve the purpose of achieving the functions appreciated by the citizens. Thus, the proper implementation of Phase III allows both the determination of the costs of resources which will lead to the fulfillment of the needs reported by LGU stakeholders, and the verification of the determinations of the ABB process. The implementation of Phase III also affects setting a list of resources necessary for performing the scheduled services and the scope covered by the analysis of the production capacity.

#### 4. Conclusion

The evaluation of the opportunities offered by contemporary costing concepts allows us to conclude that these systems can be successfully adapted and implemented in the operations of local government units. Special importance in this respect should be assigned to the procedures enabled by these theories, providing for the recognition of stakeholders' needs and the evaluation of the importance of the qualities and functions of the services offered within the given budget. This conformity of needs and high level of usefulness are the necessary conditions for the efficiency of the activities and effectiveness in their performance. The model solution presented in this paper is one of the possible solutions in this respect, while its adaptation in LGUs management system will bring measurable advantages, not only financial in nature.

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