

## Possibilities of Continuous Improvement of Budgets by the Kaizen Method in the Current Context

*Svetlana MIHAILA\**, *Galina BĂDICU\**, *Nicolai JIERI\**

### Abstract

*Stimulating the tendencies of integration of the Republic of Moldova in the world economy requires the indigenous entities to continue to be efficient, competitive, very operative, but also sustainable, given that obtaining long-term positive financial results depends on sustainability. In order to guide their actions, the entities request information on the activity carried out, in which the most important place is the budget. In this article, the authors are describing the Kaizen method - a Japanese concept which assume continuous improvement of the processes and budgets. The importance of budgeting method consists in efficiency of application, not just in performance of it. Once the company has selected a method of budgeting it should to make sure that this instrument is applicable and in concordance with its necessities. The investigation methodology includes fundamental approaches regarding the possibility of applying the Kaizen method in the local entities. Thus, the dialectical method was used with its fundamental elements. The methodology and recommendations formulated can serve as a support for managers in order to sustainably improve the results from the long-term improvement of the work process. This means full and active involvement in the Kaizen process of employees at all levels, naturally developing a sense of ownership and self-discipline.*

*Key-words: kaizen, budget, efficiency, performance, improvement, European integration.*

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## 1. Introduction

The acceleration of the globalization process, the speed of technological development, the development of the digital economy is just some of the main causes that require the evolution of managerial accounting in order to adapt its specific techniques and methods to the new information requirements of the entities. Regardless of the economic situation of an entity, any manager wants to improve the efficiency of the existing team, the economic-financial activity of the entity, and the results obtained are increasing.

Currently, in the local specialty literature, the problems of the budgeting process aimed at developing the team, the entity in general, the projects of new ideas of success, and the creation of an operational management system of the entity on responsibility centers are not sufficiently investigated and complex; to enable the strategic objectives to be achieved, with the most efficient use of resources, in order to increase the competitiveness and performance of the entity.

The importance and topicality of scientific research, in this field, are conditioned by the presence of various efficient management modes, which solve the problems of the budgets, one of them being the Kaizen budgeting, a method that has begun to be used by businessmen. The Kaizen concept is a simplification by dividing a complex process into smaller processes. Thus, this method eliminates losses from a process by considerably improving it, using systematic observation and statistical data, continuously changing the tools, but also the techniques used.

In relation to the entity's objectives, one of the most important Kaizen applications is Kaizen Costing. Adopting management decisions based on this method allows the company to optimize its operations and open additional opportunities, which it did not previously have, due to too high costs or too much rigidity in operation (Kinga, 2019).

The circumstances set out above confirm the topicality of the investigated topic and require the complex examination of the budgeting problems within entities and its improvement in accordance with the requirements of the current context. Thus, the present work falls within both the sphere of cost management issues, as an instrument in the management of entities, as well as in the field of accounting research, especially management accounting.

The purpose of this research is to investigate the theoretical and practical aspects of budget improvement, within entities, through the Kaizen Method, in order to identify the existing problems and to base the priority directions of improvement and optimization, in the current context.

To provide answers, the authors, through the methods of analysis and synthesis, referred to sources of information with reference to the topic addressed, such as: relevant scientific papers of the specialists in the field, consulting the websites of the international bodies involved in the standardization process and accounting harmonization, as subsequently by using the methodology of induction, deduction and comparison, the results obtained to be materialized in the present investigation.

In order to achieve and enhance the research purpose, the following objectives have been set:

- analysis of approaches to the Kaizen concept;
- theoretical and scientific examination of the economic content of the Kaizen method;
- study of the 5S organizational model and substantiate the need for its implementation in order to reduce costs, by eliminating activities that had no results;
- elucidating the problems regarding budgeting in order to continuously improve the number of working hours per product unit;
- specifying Kaizen particularities and training factors at operational level;
- formulating recommendations regarding the improvement of the budgeting, within the entities, by the Kaizen Method.

In this context, we mention that in order to be effective, the Kaizen method must become a daily activity, which is implemented, with the help of experiments that are quickly adapted, without effort, once, over a certain period of time and as a result we observe a slow, gradual, but continuous improvement, with visible effects from day to day, respectively the effects lead to increased productivity, quality and, not least, profit. Among the most important rules of the method are the execution of restructuring, the monitoring of the results and their adjustment, but at the same time, it rejects the static periods, in which the entities do not go through changes, and supports the innovation in any form and size.

## **2. Literature review**

The beginning of any scientific endeavor is the directing of the general research attention to the sphere of scientific knowledge divided by specific fields of research. The research area of this paper represented the problem of the modern approaches regarding the budgeting at the entities level, in order to optimize the business processes and to reduce the costs by applying the Kaizen method, a theme

that can be included in the accounting research field, both in the field. accounting research and budgetary control.

The problems of improving the budget, including by the Kaizen method, in general aspect, are found in the research works of some economists, such as: Masaaki Imai (1985), (Budugan, 1998), Needles (2000), Diaconu (2003), Bouquin (2004), Tabără (2006, 2012), Srikant Datar (2017), Kinga (2019).

The contribution of the mentioned scholars is significant, however, their works do not deal exhaustively and do not reveal, in a complex aspect, the requirement of improving the budget, which highlights the existence of reserves for improving the budget within the local entities. The academic research environment in the Republic of Moldova is still at the beginning of capitalizing on the Kaizen method, a fact proven by the lack of publications in the specialized literature in the field, and for the local entities it is a relatively new notion as the theory and practice of management "a new challenge". This fact has argued the need for Kaizen method research by the authors in this publication.

In order to analyze the budgeting using the Kaizen method, it is first of all necessary to examine the significance of the budget, its objectives and importance, as well as the evolution of the Kaizen method. The budgeting approaches highlight the elements that underpin the budget definition: *accounting tool, ensure customer satisfaction and market success, contribute to the achievement of objectives for a limited period of time, delegate responsibilities to managers and control the fulfillment of concrete indicators at different levels of responsibility of the entity and so on.*

Budgeting is the typical accounting tool used by entities to plan and control the activities they need to undertake to ensure customer satisfaction and market success. In order to establish certain strategies, tactics and objectives before starting the activity, the planning process forces managers to make efforts. No matter how perfect the strategy of the entity, during the course of its activity, it is necessary to control the forecasts in order to detect the causes that lead to deviations, establish the responsibilities and specify corrective measures for them.

The systematic process of ordering future actions, which contributes to achieving the objectives for limited periods of time, represents budgeting (Budugan, 1998). It makes it possible to delegate responsibilities to managers and control the fulfillment of the concrete indicators of the budgets at different levels of responsibility of the entity.

Effective budgeting requires good management, which means that certain rules must be respected: *participants must apply a realistic approach, meet deadlines and use flexible procedures for applying budgetary provisions.*

A first objective pursued by the elaboration of a budget refers to the forecasting both the financial aspects (the profit, the cash flows, the financial position of the entity, etc.) and the non-financial ones (the number of units produced or sold, the number of employees, the number of new products introduced on the market etc.) of the plan and serves the entity as a work program for a future period.

The second objective refers to the fact that the information should be as accurate and relevant as possible to the users, presented in a logical order. The budget, as a document, should start with a clearly formulated title or name, which should also indicate the time period taken into consideration. The period chosen as a reference for the preparation of the balance sheet should be dictated by the purpose pursued through budgeting (*year, with shorter periods for periods: quarters, months*).

The budget is an action plan that represents a method of allocating resources expressed in monetary or natural units. It is most often prepared for a calendar year, divided into smaller sections of time, e.g. quarters or months or for a period necessary to fulfill a specific task (Horngren, 2002). In practice, partial budgets are created and combined into a single company budget.

The significance of the budget is characterized by its functions (Kinga, 2019):  
*informative function* - providing managers with information on the degree of implementation of tasks in the form of periodic budgets. They are the basis for evaluating activities in certain fields of activity. This allows the creation of an information base necessary for the management of the company;

*coordinating function* - connecting the activities carried out in different fields of activity and including them in a coherent budget. This ensures the compatibility of the objectives of the individual areas with the objectives of the whole company;

*motivational function* - exerts an influence on the managers and employees responsible for a given budget, so that the activities implemented by them are appropriate in relation to the company's objectives. It is important to create a budget whose goals are ambitious but at the same time feasible;

*control function* - allows to evaluate the degree of completed tasks. There are three types of analysis: initial (during budgeting), current (during budget execution) and resultant (after budget execution). It offers the opportunity to determine the differences between the finalized plan and the assumed one.

A US study highlighted four factors that can lead to a reduction in the efficiency of the entity's planning and budgeting processes, *in order of importance* (Horngren, 2002):

1. The absence of a well-defined strategy.
2. The absence of a clear link between strategy and operational plans.
3. Lack of individual responsibility for the results.
4. The absence of relevant performance measurement indicators.

The surveys found (Horngren, 2006) that for managers (Australia and Japan) budgeting is the most useful of management accounting activities. The financial managers of the largest industrial entities in the US, Japan, Australia, the UK and the Netherlands highlight a number of interesting similarities and differences between budgetary practices in different countries, the table 1.

**Table 1. The results of the survey**

Nr.	Criteria of the survey	Countries included in the survey				
		USA	Japan	Australia	UK	Netherlands
1.	Percentage of entities that draw up a complete general budget	91%	93%	100%	10%	100%
2.	The percentage of the entities in which the responsible managers participate in the debates of the budget committee	78%	67%			82%
3.	Classifying the budgetary objectives in order of their importance to the responsible managers ( <i>1 being the most important</i> ):					
	✓ Return on investments;	1	4			
	✓ Profit from the operational activity;	2	2			
	✓ Sales revenue;	3	1			
	✓ Cost of production	4	3			

*Source: elaborated by the authors after (Horngren, Datar, Foster, 2006)*

From the information presented, it is observed the widespread use of the budget in all countries. The differences appear only in relation to the budgetary objectives.

The critical analysis of the literature has allowed us to find that the Kaizen method was developed in Japan between the 50s and 80s of the last century, but the name was officially recognized and registered as a trademark in the USA in 1985, when Masaaki Imai, the founder of the Kaizen Institute, published the book "Kaizen-key to the competitive success of Japan". Together with several Japanese businessmen, Masaaki Imai, at that time, was monitoring American companies to

discover the secrets that can increase the competitiveness and performance of a company. Until then, the name Kaizen was just a common noun in Japanese, meaning "always better." Professor Masaaki Imai is known as "Guru Kaizen" and "the parent of continuous improvement." The book that defines Kaizen philosophy and practices, published in McGraw-Hill Publishing House in 1986, has been translated into over 20 languages and published in over 30 countries. The book had the impact of being adopted by a very large number of entities and by a very large number of managers of Kaizen techniques and principles. In the specialty literature, the notion of "kaizen" was developed more deeply by American economists (Needles, 2000), (Srikant Datar, 2017) and Romanian economists (Tabără, 2006), (Diaconu, 2003).

Daihatsu perceives kaizen as one of the six valences of the budgeting process (compared to the five-year budget), which comprises the following components (Bouquin, 2004):

- 1) the budget that defines sales, variable costs and margins;
- 2) the budget for the supply of materials and raw materials;
- 3) the budget for the rationalization of the installation and the reduction of the variable costs (the essential part of the kaizen);
- 4) the budget for the use of labor force;
- 5) the investment budget;
- 6) the budget for the capacity costs of the company and for the general expenses.

### **3. Research methodology**

Although there is no recognized unanimous approach to budgets, the literature gives them many advantages:

- *contributes to the elaboration and implementation of strategic plans and to the motivation of the employees.* The strategy specifies how the entity combines its capabilities with the opportunities on the market to achieve its objectives. The inability to reach the levels set by the budget is perceived as a failure. For these reasons, many managers prefer to set high but achievable goals for their subordinates. As they approach a goal, they make a greater effort to reach it.

- *provides a reference framework for performance evaluation.* Budgets allow to overcome some shortcomings related to the use of past results to analyze current results: past results include past failures and performances; in the future, the conditions envisaged may differ from those of the past.

- *promotes coordination and communication between the subdivisions of the entity.* Coordination forces managers to analyze the relationships between specific functions or departments, at the level of the entity, in the most efficient way possible to allow the entity to reach its objectives. The communication involves ensuring that all the employees of the entity understand and accept these objectives.

To take advantage of the benefits of budgeting, managers at all levels of the entity should understand and support the budget and all aspects of the management control system.

Research shows that the difficulties and peculiarities of the budgeting process start from the way in which they are perceived by managers at entity level, the lack of capacity to reach the objectives, of coordination and cooperation, the insufficiency of ideas regarding the continuous improvement, etc.

One of the key issues that entity managers are facing is continuous improvement. The Japanese designate continuous improvement through the term Kaizen. The Kaizen method aims to reduce costs by continuously improving activities, reducing costs by involving staff in decisions making at the lower level of the hierarchical pyramid, at the workplace (Camp N., Briciu S., 2012).

In essence, the Japanese driving model means continuous improvement, which has proven over time (Toyota, Nissan Motors) that progress with small, but fast steps, leads to new, long-term, safe performance. Thus, the use of this method, emphasizes the fluency of the process of improvement and its efficiency. At the same time, the responsibility of improving the products and processes rests with the entire staff of the entity, not only of specialists. Employee empowerment is described by the proponents of the method, as a common denominator for modern managerial techniques. Thus, the employee is intelligent, responsible, creative, and therefore constitutes a productive resource for the entity. Basically, it is about delegating responsibilities, which focuses on ethics, interest in the results of the entity.

The practice demonstrates that the successful approach of Kaizen activities must be limited to the following moments: forget all the ideas currently applied in organizing the production; totally reject the existing situation; imagine how the new method will work; you do not have to look for perfection, it is good a 40-50% improvement of the existing situation; don't make big expenses; the problems you face offer you the opportunity to use your managerial knowledge and skills; the ideas emanating from more people are better than the idea of a single person.

The investigation of the bibliographic sources allowed to approach an efficient organization model of the entity, which would allow the organization,



cleaning, maintenance, safety and productivity of the workplace, both in production spaces and in offices - the “5S” method. In this context, the question arises: why the organization of the workspace? Because disorder prevents us from finding things first, we execute unnecessary movements, which do not add value, can hide some problems.

The implementation of “5S” has the benefit of obvious improvements in the application areas, as well as the change of people's attitude towards their work and what they do. It is inadmissible to implement 5S with only one or two people. There is a need for all employees to be involved. It involves determination, perseverance and cooperation. Thus, this combination creates a new sense of team identity and a more capable climate in the entity, which through action produces results.

**Figure 1. The first steps for an efficient entity - the “5S” method**



*Source: Elaborated by the authors*

Generalizing the stages of the efficient organization of the workspace, below, a comparison and explanation of the significance of “5S”. These are five words in Japanese, starting with the letter “S”: *Seiri, Seiton, Seisou, Seiketsu, Shitsuke* and which represent the key to improving the workplace.

**Table 2. The meaning of the five words (five steps) in different languages**

Japoneze	English	Romanian	What does it mean?
Seiri	Sort	Sortare	Removing unnecessary things.
Seiton	Set in order	Ordonare	Well organized work place. Ordering the things I need so that they are handy.
Seisou	Shine	Curățare	Cleaning and keeping them at work.
Seiketsu	Standardize	Standardizare	Standardization of rules, so that people independently respect the rules of management.
Shitsuke	Sustain	Mentținere	Maintain the level so that it doesn't get back to chaos.

*Source: elaborated by the authors*

From the information presented in the table above, it follows that:

1. First step involves the clear separation of useful actions and products from those that are not usable. Thus, we deduce that its purpose is to differentiate between what is needed and what is not used. In this context, as a goal it serves to establish the criteria and use them in eliminating what is not necessary, due to the movement of things and the waste of time when looking for a tool or material.

The other S, such as the Setting in order and Standardization - develop the habit of discipline in the workplace, which is usually crucial in the following phases of the 5S implementation..

2. So the second step involves arranging the data, information or tools in a logical order. The purpose is to establish a plan of care, easy and simple so that you can always have what you need, in the amount you need and when you need it. In this context, as an objective it serves the neat aspect of the workplace. From a practical point of view, the highlight of the order at the workplace is the use of protective objects and safety shoes, attention with the things when you transport them, clearly marked paths, etc. These small, seemingly insignificant things - are what make the difference. Therefore, the employees stressed the importance of the orderly workplace. In addition to these things, the 5S are also important for personal safety and health, the prevention of fires and accidents due to oil spills, the prevention of pollution and the prevention of other things, which are so dangerous to human health and safety.

3. The third step, it is cleanliness, which means eliminating the sources of loss and simplifying work processes. The purpose is to eliminate garbage, dust and foreign matter for a clean job. In this context, as an objective it serves a level of cleanliness appropriate to your needs. We would like to mention that once the faults have been identified in the early phase, they can be solved quickly and with minimal costs.

4. The standardization of work methods - step in which procedures are elaborated and new ideas are initiated for the solutions discovered in the previous steps as successful ones. The purpose is to keep things organized and clean, even in personnel matters. In this context, as a primary objective serve the standards for maintaining 5S, for example, the development of the visual management so that the abnormalities are "exposed", the creation of the visual control system, the elaboration of a manual for maintaining the standardization, the development of a color code, etc.

5. The fifth step, moreover, the latter, implies more precisely the observance of the other four points above in any daily activity, at work, but also in personal

life. The purpose is to do the right thing. In this context, as an objective is the participation of all for the development of good habits and respect for the rules, communication and feedback, individual responsibility, practicing good habits, forming the habit and creating discipline in the workplace.

All these stages bring costs down, by eliminating activities that had no results, constant innovation, high quality of products and services offered and productivity, to eliminate work without clear results. Kaizen steps can be performed both individually and in larger or smaller teams, the efficiency of the system does not depend on the number of people involved, but short sessions are needed, in the case of teams, or moments of thinking, when it comes to a single individual, to determine the changes.

The Kaizen method is a multifunctional approach and signifies, first of all, a strategy focused on the continuous improvement of all the activities of the entity in a participatory manner. Simultaneously, it represents a current managerial practice, according to which one day should not pass without a slight improvement. It is also a defining feature of the Japanese mentality for a long time.

As a result of the study, the authors found that the Kaizen method has two major components:

- First it is the managerial maintenance of the entity, in the sense of directing the current activities and tasks of a technical, managerial and operational nature of the standards regarding the work processes.
- Second component, is the managerial improvement that refers to those processes through which the labor standards are improved.

To achieve the most efficient results the Kaizen method works and relies on the simultaneous realization of the following three principles:

- consider the process and the results (not just the results);
- systematic thinking about the whole process and not only taking into account the immediate results (for example, a larger image regarding the activity of the entity, not only from the point of view of the managed sector, narrow); and
- proceed with a learning approach and intention, not with trial or guilt (because the fault is useless).

The before mentioned allow us to deduce that the Kaizen concept implies a gradual increase to ever higher standards of production, by improving the quality and reducing the waste, by small but continuous improvements, which involve all the staff, from the executive to the workers from the lower level. It can be considered a proactive method, which promotes the principle that nothing is perfect

and everything is perfect, if all employees are involved and have decision-making power, at operational level, by delegating responsibilities.

Research conducted on the Kaizen method has shown that its need, within the local entities, appears as a consequence of the increasing degree of difficulty of solving increasingly complex problems, and of the development of entities, in the current context. In order to appreciate the extent to which the objectives are achieved and the strategies are effective, any managerial decision must be based on a good knowledge of the situation, which is not possible in the absence of efficient budgetary management.

Based on the exposed material, we can deduce the advantages of the Kaizen method:

1. The “5S” prepare the morale of the employees for Kaizen;
2. Form the reflex of self-discipline and compliance with Standards;
3. Highlighting irregularities;
4. Reduction / optimization of pointless movements (which does not add value);
5. Identifying latent defects and finding cheap and life-saving solutions;
6. Improve work efficiency and reduce costs.

#### **4. Practical aspects**

In order to estimate the activity of an entity and raise the level of performance, as well as for a deep perception of the budgeting results, it is important to approach it from a practical point of view. In this context, as an example, Budgeting will be used for the continuous improvement of the number of working hours per product unit, taking into account the factor of improvement.

*Example 1. Suppose that an entity establishes the decrease of the number of hours - work per unit of product, as a factor of improvement (updating) of the activity, and respectively, of the reduction of the cost of the manufactured products. Thus, in each quarter, the hours of work budgeted for the manufacture of an ordinary product, which constitutes 4 hours, will be reduced by 0.1 points, and of a product with a higher degree of difficulty, budgeted being 6 hours - with 0.15 percentage points.*

Taking into account this improvement factor, as a result of the budgeting, the entity aspires to obtain a reduction in the number of hours allocated for the manufacture of the ordinary product, but also for the one with a higher degree of difficulty, for the management period concerned, fact presented in the table below:

**Table 3. Budgeted data**

Quarter (period)	Ordinary product, hours	The product with high degree of difficulty, hours
1. January– march	4	6
2. April – june	3,996	5,910
3. July – september	3,956	5,821
4. October – december	3,916	5,734

*Source: elaborated by the authors*

Based on the results obtained, we observe a reduction in the number of hours allocated for the manufacture of the ordinary product, but also for the one with a higher degree of difficulty. Applying the time reduction factor for each of the products of 0.1 and 0.15 percentage points respectively will lead to the optimization of the costs with the staff in each quarter, as the effect will reduce the actual cost of production, and of course, the increase of the profitability index per product, given that the other factors remain constant, that is, the selling price and other components of the cost. The total reduction in working hours, for one year, per unit of the ordinary product will be 0.084 hours (4 hours - 3,916 hours), and for the product with a higher degree of difficulty the reduction will be 0.266 hours (6 hours - 5,734 hours), which also means a reduction in staff costs.

It should be mentioned that the most of the cost reduction associated with Kaizen budgeting, results from several minor improvements and not major "jumps". An important aspect of Kaizen budgeting is the quantity and quality of suggestions made by employees.

The correctness and relevance of the managerial decisions regarding the budgeting of prices are conditioned by the integrity of the information regarding the size of the costs. Another example can serve as a way to improve overall performance, that is, including all budgeted items, such as: the cost, a concrete program, the redesign of a product, the improvement of the production processes, of work, etc.

*Example 2. The entity establishes the coefficient of 0,997 as a total factor of continuous monthly improvement of the total budget of the costs, totaling with 2,450,000 lei, starting with February of the management period in question.*

In this context, applying the rules of the Kaizen method, the cost budget for the management period are represented in the Table 4.

**Table 4. Costs budget for the management period**

Cr. nr.	The months of the management period	Static budget, + updates, lei	Performance factors	Improved budget	Deviations from	
					Improved budget	Static budget
A	1	2	3	4	5	6
1.	January	2 450 000	1	2 450 000	0	0
2.	February	2 450 000	0,997	2 442 650	7 350	7 350
3.	March	2 442 650	0,997	2 435 322	7 328	14 678
4.	April	2 435 322	0,997	2 428 016	7 306	21 983,9
5.	May	2 428 016	0,997	2 420 732	7 284	29 268
6.	June	2 420 731,9	0,997	2 413 469,7	7 262,2	36 530,3
7.	July	2 413 469,7	0,997	2 406 229,2	7 240,5	43 770,8
8.	August	2 406 229,2	0,997	2 399 010,5	7 218,7	50 989,5
9.	September	2 399 010,5	0,997	2 391 813,4	7 197,1	58 186,6
10.	October	2 391 813,4	0,997	2 384 637,9	7 175,5	65 362,1
11.	November	2 384 637,9	0,997	2 377 483,9	7 154,0	72 516,1
12.	December	2 377 483,9	0,997	2 370 351,4	7 132,5	79 648,6

*Source: elaborated by the authors*

In the table 4, the authors intended to demonstrate numerically the benefits of applying a performance factor in budget building. Thus, in column 5 is presented the improvement, namely the reduction in monthly costs, and in column 6 the reduction of cumulative costs over the entire period of the budget year. In this context, if the entity intends to apply an improvement factor at the operational level, it is important to look at continuous performance growth, to quantify the benefit. In the example above, the cost reduction for the whole year is 79 648,6 lei, resources that can be allocated for the additional production of goods or for the creation of future economies in order to meet the current needs of the entity. Even if the value of the improvement factor is quite small, we notice that the cost effect is quite large for one year, but being applied strategically for a period of 5 years and more, then the impact will be much more impressionable.

The study indicates that applying the discount factor is a relatively modern method and has a wide applicability when making analyzes, budgets for longer periods. In the example below, we aim to demonstrate the relevance of the calculation method, given that the value of the initial costs is kept, so that for users it is better to quantify the effect when the starting point is visible, and respectively the monthly performance.

*Exemple 3. The information processed in example 2 can be updated (by discounting) using the calculation of updates through the basic formula, so  $(1 : (1+r)^n)$ , where:*

$r$  – actualization factor, and  
 $n$  – number of periods.

**Table 5. Cost budget with discount factor application**

Cr. nr.	The months of the management period	Static budget, lei	Performance factors	Improved budget	Deviations from	
					Improved budget	Improved budget
A	1	2	3	4	5	6
1.	January	2 450 000	(0,997) <sup>0</sup>	2 450 000	0	0
2.	February	2 450 000	(0,997) <sup>1</sup>	2 442 650	7 350	7 350
3.	March	2 450 000	(0,997) <sup>2</sup>	2 435 322	7 327,9	14 678
4.	April	2 450 000	(0,997) <sup>3</sup>	2 428 016	7 306	21 984
5.	May	2 450 000	(0,997) <sup>4</sup>	2 420 731,9	7 284,1	29 268,1
6.	June	2 450 000	(0,997) <sup>5</sup>	2 413 469,7	7 262,2	36 530,3
7.	July	2 450 000	(0,997) <sup>6</sup>	2 406 229,2	7 240,5	43 770,8
8.	August	2 450 000	(0,997) <sup>7</sup>	2 399 010,5	7 218,7	50 989,5
9.	September	2 450 000	(0,997) <sup>8</sup>	2 391 813,4	7 197,1	58 186,6
10.	October	2 450 000	(0,997) <sup>9</sup>	2 384 637,9	7 175,5	65 362,1
11.	November	2 450 000	(0,997) <sup>10</sup>	2 377 483,9	7 154,0	72 516,1
12.	December	2 450 000	(0,997) <sup>11</sup>	2 370 351,4	7 132,5	79 648,6

Source: elaborated by the authors

From the presented calculations, we observe that the monthly cumulative result is the same as in the previous example, but this calculation method is more representative given that the value of the initial costs is retained (column 2), so for the users it is more relevant to quantify the effect when the starting point is visible, the monthly performance (column 5), but also the cumulative performance (column 6). Applying the discount factor is a relatively modern method and has a wide applicability when making analyzes, budgets for longer periods.

## 5. Kaizen method applied to world-renowned entities

The bibliographic and online sources allowed us to select some results-curiosities from the activity of renowned entities, which use the Kaizen method.

*Example at Citizen Watch.* Citizen Watch is one of the largest watch manufacturers in the world. The assembly lines in the company's plants have a high degree of automation. Component costs represent between 50% and 60% of the unit cost of each watch. A defining element of the cost management system of Citizen is the Kaizen budgeting. The company sets all the elements of its supply chain,

including component suppliers, the objective of seeking opportunities to reduce costs. For example, at the Citizen plant in Tokyo, budgets provide for constant cost reductions with materials purchased by 3% per year. The company's engineers cooperate with suppliers to help them reduce their costs by 3%. Suppliers who are able to achieve cost reductions of over 3% benefit from higher profits.

*Example at Stabilus Romania.* Stabilus is one of the world's leading manufacturers of gas springs and hydraulic shock absorbers for ergonomic seats used in the automotive industry. Stabilus is also present in Romania, where it owns a factory in Sânpetru, Braşov county inaugurated following an investment of 10 million euros. The factory has an area of 10,000 square meters and a total production capacity of 6.5 million gas springs. As a result of Kaizen implementation, Stabilus obtained the following performance indicators: *increased productivity by 30%; reduced process errors by 70%; reduced number of complaints from customers by 50%; reduced maintenance costs by 24%; reduced energy consumption by 12%; increased number of proposals for improvement by 30%; increased time of technical availability of the machines on average by 2.5%.* By achieving such results, they were able to demonstrate market competitiveness and as a result get two new projects, which will still create about 300 jobs in STRO (Popescu, 2010).

## 6. Conclusion

The research of the theoretical and applicative concepts regarding the budgeting, as well as of the continuous improvement methods allow the following conclusions to be drawn:

- It has been found that, at present, the financial performance of an entity indicates its "health status", and in this context, we notify the importance of the principle of continuous improvement of processes.

- The presence of various performance management modes requires a certain algorithm to solve the problems related to budgets. One of these is Kaizen budgeting, a method that has begun to be used by businessmen, with the purpose of dividing a complex process into smaller processes, in order to eliminate losses by considerably improving the process, using systematic observation and statistical data, constantly changing. the tools, but also the techniques used. The budgeting activity is done for the purpose of research, what has been achieved and where the entity can be directed, meeting the objectives set out in the strategy.



- The significance of the entity's efficient organization model was highlighted - the "5S" method, which allows the organization, cleaning, maintenance, safety and productivity of the workplace, both in production spaces and in offices. In this context, the advantage of the "5S" implementation is the obvious improvement of the employees' morale, the formation of the self-discipline reflex, as well as the observance of the standards, the highlighting of the irregularities, the improvement of the labor efficiency and the reduction of some costs.

- The correctness and the relevance of the managerial decisions regarding the budgeting are conditioned by certain factor of improvement, which allow to reduce the number of hours allocated for the manufacture of products with a higher degree of difficulty, by the integrity of the information regarding the size of the costs. In this context, the impact of the discount factor on longer-term budgets has been deepened. The relevance of the calculation method consists in keeping the value of the initial costs, so as to quantify the effect of the change from the starting point, and respectively, the monthly performance.

The synthesis of the researches carried out allows the formulation of some recommendations regarding the continuous improvement of the budgets, in the current context. In order to appreciate the extent to which the objectives are achieved and the strategies are effective, any managerial decision must be based on a good knowledge of the situation, which is not possible in the absence of efficient budgetary management. Definitely the implementation of the Kaizen method is a long and continuous process, which will have a positive result on the activity and the planned results. This is a method of budget preparation, which was trying to prevent problems from year to year, as this will be done through a periodic (annual) review of expenditure. At the same time, when asked why we need the Kaizen Method, because:

- provides a clear picture for cost sharing and loss elimination;
- determines economies to be sustainable in the long run;
- it creates the corporate culture and motivates the communication by which the reduction of costs is a common thing;
- identifies the functions by which the remaining cash can be reinvested in economic growth and innovation;
- increases responsibility for decision making;
- find ways of efficient spending;
- identifies and eliminates unjustified expenses;
- involves improving the production process by: optimizing the launch system in manufacturing; setting the machines; increasing the performance of cars;

training and motivating staff; encouraging the staff in charge of identifying the possibilities of cost reduction.

We consider this method to be effective also because employees are allowed to argue the working methods within the limits of their professional competences. This will lead to increased responsibilities for the actions taken and we believe with certainty that, namely, the given budgeting method generates the increased responsibility of the staff for increasing the efficiency of the use of budgeted resources. In this context, management of local entities must regain the power of the practical spirit and begin to apply Kaizen principles. These practices, at low costs, will provide management with the opportunity for faster development through innovation - an aspect that those who use - excel. That's why Kaizen activities in Japan have always focused on action.

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