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## QUALITY MANAGEMENT KEY PROCESSES IN THE BAKING INDUSTRY

**Abstract:** Key processes arising from the strategy and business plan the company and contribute to the creation of new values and because of its importance is defined by top management. Management of key processes in the field of bakery industry Rasinski District, means first of all your choices of the process, the level of service quality and selection of priority processes for improvement in relation to the criteria of the gap and cost required to overcome the gap with the established benchmark. Monitoring the efficiency of business processes includes monitoring performance of key processes

**Keywords:** quality management, a key process, making industry.

### 1. INTRODUCTION

Processes can be divided into: process management, main processes, support processes. Each of these groups, the process can be divided on several grounds, depending on the complexity of the organization and processes, and point of view.

From the point of value creation, the processes are divided into key processes and support processes that often involve the management process. The most common classification is the process by type of activity, which is also linked with the loop quality, or product lifecycle<sup>2</sup>.

No matter how you chose the way of identification and the name of the process, all selected processes must meet the selection criteria related to three groups of aspects:

- Relevance of market
- Potential for improvement and
- Opportunity to earn.

If the analysis of these aspects determine the high ranking of each of the potential processes, it is Plitvice Lakes to the list of processes. This applies to the basic processes and support processes, from which then form the key processes. From the model of the process of the organization [11], which is a typical representative of the bakery industry Rasinski District, link analysis process and critical success factors determining the key processes. Your choices of key processes and determined the level of quality of key processes gives clear guidance on the selection of priority of process and their improvement.

### 2. MANAGEMENT OF KEY PROCESSES

#### 2.1 Defining key processes

According to [1] there are: the key processes at the highest level, the macro processes, management processes.

Macro processes include core processes and support processes. The corresponding sub processes makroprocesa and management process are key processes.

Key processes are the core business processes, customer facing processes to bring maximum value of the company. [15,1]

Basic characteristics of key processes:

- Defined by top management,
- Arising from the strategy and business plan,
- Create an economic advantage,
- Focus problem.

Key processes defined top management, not because someone else can not do for them, but because they bear the main responsibility for the operation of the business system. In this way, top management gives importance to defining the process and show by example that needs to be done on the identification process.

Key processes responsible for the process owner, and the partial processes are responsible persons (employees) for their conduct, although if you look at the organization as a whole, the manager of the process exists on every level. Each partial process, can be decomposed to the level of the process that is still not decomposed (primitive) processes.

Key processes arising from the strategy and business plan. If the strategic goal to enter the market with more new products, a key process will be a process of new product development. Top management has to achieve maximum profit in the given circumstances. Will therefore be considered as key processes that directly or indirectly generate profit. Thus, "market research" process that creates a precondition for a profit and therefore key, and "Maintenance of machinery and equipment" are rarely among the focus of top management. Key processes should not have too - the more you have, they lose focus.

The analysis of the quality objectives and success factors can be identified key processes.

Each of the key process involves a greater or lesser extent, the activities of the process described network processes.

According to ISO 9001:2000 organization should identify the processes needed for QMS and their application throughout the organization. The result of the additional value. Because of this process is not a treatment. Required of management to all the processes taken into consideration in terms of their role in achieving the objectives of the organization. Thus creating a chain process, from the end of the chain (corporate objectives) to previous goals of component processes.

In addition to the organization, to achieve the objectives of the process (should) have with other stakeholders - the interested parties. Process chain is a chain of value creation and should therefore start from the needs of interested parties to meet their needs. Standard requires the organization to determine the order and connection of identified processes. The order process is important because it indicates that the processes related to achieving the desired output. Interaction between the process point to the connection between the process, the feed input, on the one hand, and output destination, on the other side.

The identification process is one of the requirements of quality management systems while the non-organization means, first, key processes, which may be a measure of its efficiency.

### **3. THE KEY PROCESS IN THE BAKING INDUSTRY**

Key success factors for any business to be determined separately, but in general I can point out the following: the accuracy of delivery, price, product quality, product safety, design, location, value added

products, and more. After identifying key success factors is the mark-up businesses for each factor separately.

Critical success factors must be improved to ensure the success of business strategy. Typically, they are 20% of the factors that cause 80% of corporate performance and its strategic business units.

The environment determines which are the critical success factors that the company must have and use it to achieve business success.

**CSF** - (*Critical Success Factors*) organizations in the baking industry are:

1. available capital inflows, strong economic potential,
2. high quality raw materials, products and services,
3. trust market
4. competence of staff and equipment
5. the use of best technical and technological practices,
6. training of personnel,
7. implementation of standards

Based on CSF set aside the processes that characterize the selected organization. Starting from the loop quality processes that are characterized, selected, industrial organization (large) plants in the baking industry can be:

- **Management Responsibility:** management operations
- **Resource Management:** general business, accounting and finance,
- **Product realization:** the production, procurement, marketing and sales, development, maintenance, storage and transportation.
- **Measurement, analysis and improvement:** quality control, quality assurance - quality management.

The analysis of the connection process and critical success factors in the baking industry can be identified as key processes: the process of production and distribution,

sales and procurement process and storage process. [14]

Production process, by its nature, creates additional value.

Consumer demand, especially in the industry, focused on the delivery of fresh, hot products and on time (Just In Time), which for many companies in the industry, which adhere to this principle makes a significant competitive advantage. Therefore, the choice of distribution channels [9] plays an important role in the process of supply markets, which in response to the question "how to sell", exposes the role and importance of marketing, and as a consequence of the competitive struggle in the market raises the question of "how to rationalize," which lower cost is achieved with a constant quality in order to expand the market [13], exposes the concept of logistics. Business logistics, a business function, logistics includes supply, transportation, storage and distribution. In the case of the bakery industry, an important role all the above processes. Sales process along with marketing are crucial to the success of the business. Through the sale of production is "associated" with the market, while marketing sinegriji the sale determines the "voice of customer", customer satisfaction assessment products and services offered, ie. view of quality.

Marketing, which in most companies, operates primarily as a service, not as a business sector, through market research directly affects the creation of profit.

In most companies marketing sector is not directly related to transport, although it is preferable to be.

Key factors of production quality in terms of technology are in operation:

- The quality of flour and water that is metered (consistency test),
- Final fermentation (during the final fermentation in relation to temperature and humidity)
- Conditions in the furnace when inserting the pieces into the furnace

(activity throw water vapor into the furnace, firing temperatures is also an influential factor but is less important for the quality).

In order to measure the key processes, research that is verified correct choice of key processes and determined the level of quality of key processes. In order to determine the level of quality of key processes is necessary, first of all, define the methodology of evaluation, measurement of key processes, thus

confirming the efficiency of the observed process. The first defines the objectives of the organization and determine their metric, ie. level of significance for the global objectives of the organization. These objectives refer to specific processes, as shown in *Table 1* Exchange process, presented in *Table 1* and the objectives of the biggest impact on the quality of the organization's key processes determining the quality of the organization (KP).

Serial number	Goal	Process										
		Purchase	Storage	Production	Distribution	Sales	Marketing	Development	Machine maintenance	Human Resource Management	Quality management	Management of financial resources
1.	Customer Satisfaction	-	-	+	+	+	-	-	-	-	-	-
2.	Profit per employee	-	-	-	-	-	-	-	-	-	-	+
3.	Product quality	+	+	+	+	+	-	-	+	+	+	-
4.	Manufacturing Technology	+	+	+	-	-	-	+	+	+	+	+
5.	Purchasing and storing raw materials	+	+	+	-	-	-	+	-	+	+	+
6.	The required level of stock	+	+	+	+	+	-	-	-	+	+	+
7.	Reduction in repayment from the sale	-	-	+	+	+	+	-	-	+	+	-
8.	The accuracy and readiness of equipment	-	+	+	-	-	-	-	+	+	+	+
9.	Delivery Time	+	-	+	+	+	-	-	-	+	+	-
10.	Freshness of products	-	-	+	+	+	-	-	-	+	+	-
11.	Ensuring the safety of products, standardization	+	+	+	+	+	-	+	+	+	+	+
12.	Informing the public by sale	-	-	-	-	+	+	-	-	+	+	+
13.	Competence of staff	+	+	+	+	+	+	+	+	+	+	+
14.	Production innovation	-	-	+	-	-	-	+	-	+	+	+
15.	Utilization of production capacity	-	-	+	-	+	-	+	+	+	+	-

*Table 1: Relationships between process and goals [10]*

Table 1 presents the relationship between process and goals. Since this is an average organization, it is important that the indirect connections of interest (where you can determine the indirect impact - a goal projection effects), are indicated by (+), while the possible direct effects of weak intensity are marked with (-). Therefore, important was the importance of goals for the process, not only their relationship and impact.

**4. QUALITY LEVEL OF KEY PROCESSES**

Usually the key processes and their analysis of access in two ways:

Using the list of processes to determine those processes that contribute to the creation of value for the

organization.

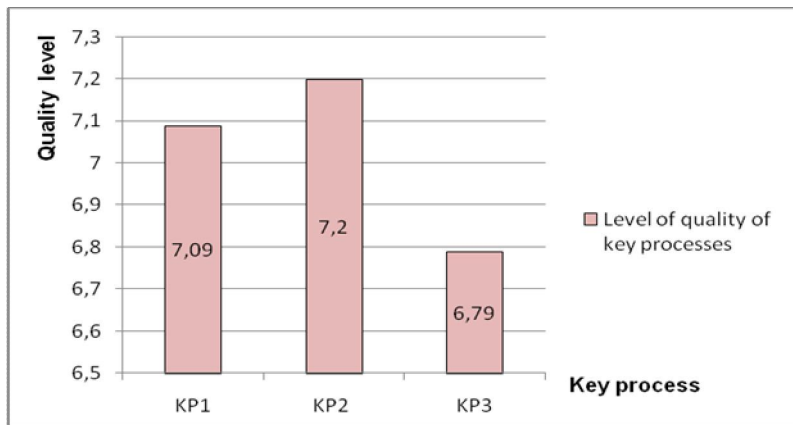
Determines a unique key process of the organization, while consolidating all the processes in the organization of input to output.

As a key process in the bakery organization could be identified:

- *KP1*: Production and distribution,
- *KP2*: Supply and storage,
- *KP3*: Sales.

Level of quality of key processes was obtained as a mean grade objectives of the process, using *Table 1*, to identify the relationship (is there a link between the objectives and processes) and rating for each objective in turn.

Level of quality of key processes shown in Figure 1:



**Figure 1: The level of quality of key processes**

Quality levels of key processes are obviously very close in value, and the gap between the level of benchmarking. Gap analysis in relation to the level of benchmarking was used for the selection of priorities of key processes.

**5. PRIORITY SELECTION PROCESS**

The choice of priority of the process depends on: the degree (level) process priorities and financial resources of the company. The level of process

priorities determined by the level of process quality, which should improve, promote, and the financial potential of the company to a large extent the limiting factor for investment. The priority, though, seems a key factor in terms of decision-making, which is the jurisdiction of the strategic management of the company. In cases of extreme urgency, investment decisions are made faster than usual, and the necessary funds to provide the most credit.

For successful establishment - prioritizes the process is necessary to define the

following phases:

- Identify the processes that need to improve,
- Determine the quality level of the observed process.

Based on these data still can be defined:

- Priority processes and sub processes within them and
- Schedule for implementation to bridge the gap between the observed process and the process of the reference company that was taken as the standard.

Schedule for implementation to bridge the gap between the process of analysis is the culmination of the process, and therefore has not only its theoretical foundation, but also great practical importance, which is the goal in terms of quality improvement processes.

Processes that are determinani as candidates for promotion must first decomposed in an appropriate manner, so that you easily recognize all the shortcomings of the process. Until these data we detailed analysis of all aktivosti the link between activities. Great contribution in this case can be achieved and the expert assessment, which can significantly help in shaping the image of the reporting process (The process of candidate for promotion).

Processes for improvement are

primarily those processes that play a crucial role in the reporting system - a key process.

Then, to determine measures to improve the process and the dynamics of the planned measures, in order to achieve the level of best in class.

Schedule a time for time and contains a projection of activities to improve processes in real time, for which improvements can be realized.

Criteria ranking process, could be the relationship: the level of the gap / costs.

In the event that the costs of measures to improve the same for all processes, it is enough to rank processes based on the gap of the process (Figure 2). However, if a cost does not match the size of the gap level ranking process is changing.

The processes that were the first in rank, not including the cost, now occupy the lower ladder ranking position. And vice versa, if the processes of low-level (level gap is lower), the gap can be bridged at a lower cost, the process of changing its rank in the scale, upward.

In this case the costs have a significant role in the ranking, prioritization process, candidates for promotion in order to protect the data of organizations surveyed value of costs may be expressed and the overall numbers.

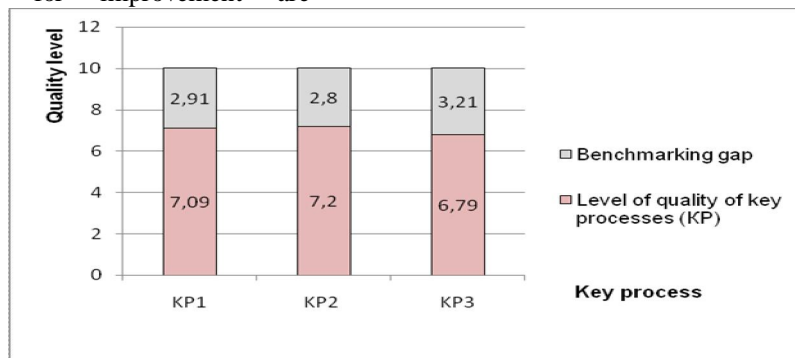


Figure 2: The level of the gap in key process in relation to benchmarking the level of

By bringing together all the processes in the organization in a key process, we come to the level of the gap in relation to

benchmarking the level, as shown in Figure3.

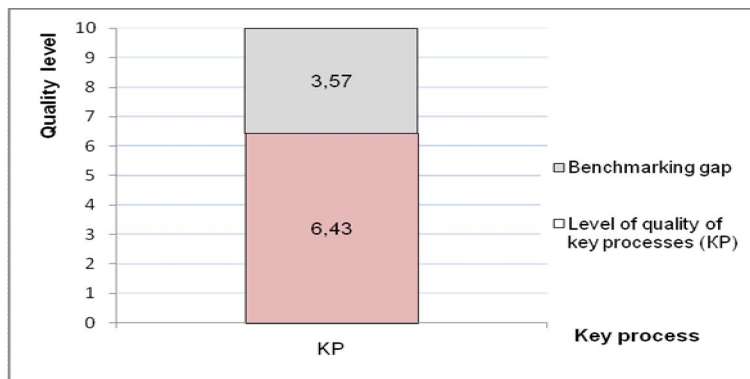


Figure 3: The level of the gap of key processes in relation to benchmarking the level of

Efficient way in terms of achieving the desired effects is a gap analysis identified key processes *KP1*, *KP2*, *KP3*.

Table 2 The process of the first rank of priorities is the one with the biggest gap in relation to the reference level, in this case the sales process [6].

Candidate process to improve	Production and distribution	Supply and storage	Sales
Number of the	1	2	3
Level of service quality	7.09	7.20	6.79
Gap	2.91	2.80	3.21
Ranking process priorities	2	3	1

Table 2: Determination of the priority ranking process

Determining the priority ranking process based on the size of the gap in relation to benchmarking the level given in

## 6. CONCLUSION

Quality level of the identified key processes in the baking industry indicates a significant potential for improvement. The ranking process, prioritizes process improvement needs to be made not only in relation to the size of the gap in the level respective to the reference level but also in relation to the value of the costs required to overcome the gap. Ways of finding a priority of the process are the basis for defining the methodology to bridge the gap between the process and the first step schedule of activities.

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