

# **The impact of supply improvement processes in strategic management: a case study on an industrial restaurant**

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## **Abstract**

In order to understand the relationship between Strategic Management and Process Management, this case study aims to identify the impact of a process improvement project in the results of an industrial restaurant chain in Brazil. The research analyzed the current Supply Processes and proposed improvements that achieved financial and qualitative gains.

**Keywords:** process management, strategic management, supply chain

## **Introduction**

Studies indicate that only a small part of strategic actions that are planned are actually implemented successfully by organizations. Failure rates in implementation range from 70% to 90%. The rates are so high that some executives believe that the capacity to carry out the strategy may be more important than the strategy itself (Kaplan; Norton, 2000).

In this scenario, the Business Process Management (BPM) comes as a management discipline that tries to identify the customer's focus and promote a systemic view of the organization in order to facilitate the implantation of the strategy (Tragear et al., 2010). To understand the relationship between Strategic Management and Process Management, the objective of this case study is to identify how an improvement project of Supply processes impacts the results of a network of industrial restaurants in Brazil.

In order to meet the objective of the research, the case study analyzed the current situation and proposed improvements to the processes of supply of inputs of the business unit, an Industrial

Restaurant that provides services to industries. From the results of the research, the conclusion was that the project had a representative impact on the results of the organization under study and led to real financial and qualitative gains.

The theoretical references of the research were based on the understanding of definitions and trends for the areas of Strategic Planning, Process Management, Supply Management and the market of industrial restaurants in Brazil. This bibliographic review oriented the techniques and tools used in the case study.

## Theoretical References

### Strategic planning

In the corporate world, 'strategy' may be understood as the set of new rules and guidelines that orient the development of organizations (Marino, 2005). As a complement, Mintzberg et al (2006) state that a competitive strategy means deciding to carry out a set of different activities to deliver a unique mix of values to clients and place the organization in a differentiated status in comparison to the competition.

Kaplan and Norton (2000) warn that, regardless of the way the strategy is formulated, the capacity to carry out the strategy is more important than the quality of the strategy in itself. For Caetani et al (2013), implementing the strategy involves translating the strategies into results, i.e., into the actual application of strategic decisions to organizational factors.

### Projects for improvement of processes

An answer to the challenge of executing strategies is the Business Process Management (BPM). Jesus and Macieira (2014) define 'process' as the manner a business consumes resources to generate products and/or services of value to customers. This definition stresses the importance of understanding the company from its own processes, because this is the way to understand how effectively the company uses its resources. The BPM CBOK (ABPMP, 2013) outlines the BPM lifecycle in Figure 1:

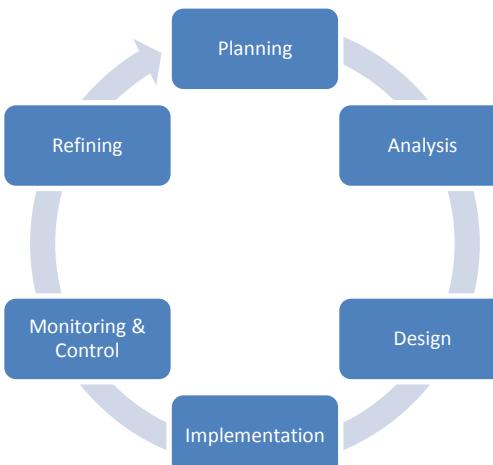


Figure 1 – BPM Lifecycle  
Source: ABPMP, 2013.

The objective of the Planning phase is to make sure that the business process is aligned with the organization's strategic objectives. The phase of analyzing the process reviews the "as is" condition of the process to understand the results it produces and its capacity to meet the intended goals, besides analyzing restrictions and ruptures that interfere with the performance of the process. (ABPMP, 2013)

In turn, process design approaches the process change that will impact the attainment of organizational goals and strategies and will please the customer via a perspective 'from the outside to the inside'. The implementation phase of the process involves implementing the process as defined in the process design. (ABPMP, 2013)

Organizations carry out these first four phases of the BPM lifecycle in the form of projects for improvement of processes. However, the efficacy and efficiency performance of the processes must be constantly assessed. Monitoring and control refer to managing the performance of the process, i.e., constant measures to check several dimensions of the process: time, cost, capacity and quality. In this context, it is important to understand the definition of the process, which goes beyond functional barriers. (ABPMP, 2013)

This phase increases Refinement, which is the last step of the lifecycle, since it checks if the process delivers what it should. If improvements are required, preventive and corrective actions are taken to 'refine' the process.

As commented before, note that the process lifecycle can and must be aligned with the cycle of strategic management. The changes proposed in the strategies are carried out by means of the actions of the process management cycle.

## Supplies

The determination of which strategic actions will be made possible by means of improvement to processes depends on the relevance of these processes for the organization strategy and on the gap between the current performance of the process and its optimal performance. The organizational unit of the Industrial Restaurant, the object of the case study, prioritized the process of Supplies, from negotiation up to receipt, including development of suppliers. This choice was made based on the impact of the cost of raw materials (food, drinks and materials) on the margin of the business unit as well as the low efficiency of the process.

According to Lambert (2008), the processes of Supply Chain Management identified in the Supply Chain Global Forum are: relationship with the client, relationship with suppliers, customer service, demand, production flow, product development and marketing, and reverse logistics. In this research, the focus of the study was on processes of management of the relationship with suppliers and management of demand.

The process of managing the relationship with suppliers sets the structure of how relationships with suppliers will be developed and maintained. Partnership relationships are developed with a small sub-set of suppliers based on the value they generate to the organization, whereas traditional relationships are set with other suppliers, with service levels agreed in a contract (Lambert, 2008).

In turn, demand management is the process of supply chain management that balances customers' requirements and capacities of the chain. The process is not limited to forecast: it also includes synchronization of supply and demand to increase flexibility and reduce variability. This requires coordination of all aspects, from marketing requirements to production plans in an integrated manner (Lambert, 2008). Therefore, logistics must be considered at a strategic level so as to gain competitive advantage (Stock et al., 1999).

## Market of industrial restaurants

The market of industrial restaurants can be measured by the figures published by ABERC (Brazilian Association of Providers of Collective Meals) in 2013. The market of collective meals in Brazil supplies 11 million meals/day. The turnover is as high as R\$ 16.6 billion/year and provides 195,000 direct jobs. It consumes 6,000 tons of food/day and represents an income of R\$ 1,8 billion/year of taxes and contributions.

ABERC estimates that the theoretical potential of collective meals in Brazil is over 45 million daily units, which shows that this segment still has room to grow. The potential market is estimated in 24 million meals a day for company employees and 19 million meals for schools, hospitals and Armed Forces. The growth forecast in this decade is 10%/year and will double in 7 years, thus participating in the development of the country, increasing its participation in school meals and incorporating meals in many collective events.

## Method

The purpose of this research was to check the impact of a project of improvement to Supply processes on the strategic objectives of a network of industrial restaurants in Brazil. To reach the proposed objective, a bibliographic survey was carried out, then a case study which led to observe the influence of the improvement project of supply processes on the strategic objectives of an organization responsible for a network of industrial restaurants.

The case study format was chosen because it is the most recommendable strategy to examine contemporaneous events when the relevant behaviors to be studied cannot be handled and the context in which these behaviors take place cannot be disregarded (Yin, 2005).

The operationalization of the case study followed the protocol shown in **Erro! Fonte de referência não encontrada.**:

*Table 1 - Study Case Protocol*

<b>Overall objective of the case study</b>	To identify the impact of a project of improvement of supply processes on the strategic objectives of a network of industrial restaurants in Brazil.
<b>Data collection: In-depth interviews</b>	Several in-depth interviews were made with players from the supply process and from the organization's management area in order to understand the current situation and detect opportunities for improvement.
<b>Data collection: document analysis</b>	The document analysis was conducted to know the designed flows of the current processes and to analyze data from the performance of the process.
<b>Data collection: direct observation</b>	The researchers visited both the organization's headquarters and an industrial kitchen, including the reception area and the food storage area.
<b>Aspects analyzed</b>	Processes carried out; flow of activities; tools used; qualification of the people involved; conformance of the system; limitations of suppliers; desired gains; proposed improvements; indicators; roles and responsibilities.
<b>Data collection instrument</b>	The aspects analyzed were operationalized in a semi-structured interview and observation script.
<b>Study timeline</b>	The project was carried out in August 2013. The data analyzed reflected the 3 previous months.
<b>Data analysis</b>	The data was analyzed considering the potential for gain of the proposed improvements.

*Source: Developed by the authors*

The organization under study provides several services related to the well-being of industry workers, including preparation of meals and management of in-company restaurants. This is one of the key business branches of the organization. The business unit of Industrial Restaurants provides mostly the southern region of Brazil with over 100,000 meals a day.

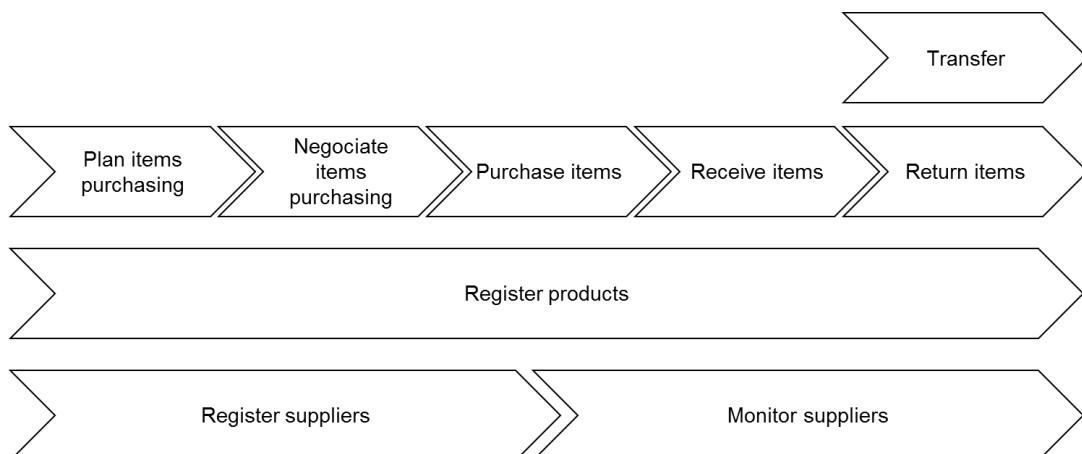
## **Analysis and Discussion**

The mission of the organization in question is to favor competitiveness of its clients by setting an environment that promotes human development. This mission is accomplished by providing services to industries, including provision of meals.

The organization's executives noticed that the organizational unit of the Industrial Restaurant had a deficiency in its processes of the Supply area and set the improvement of these processes as the focus of activity for the period, considering that such improvements would help attain the organization's strategic objectives. Among these strategic objectives, the following stand out for purposes of this research: (1) the need to promote relationship with the market; (2) guarantee of operational efficiency via efficient, integrated support processes; and (3) guarantee of availability of infrastructure and systems.

The case study followed the process management method described in the bibliographic review. In the first step, three specific objectives were set for the project, derived from the strategic objectives: reduction of negotiated prices, reduction of process costs and reduction of process time. These objectives became the direction to define and prioritize improvement actions to be implemented at the end of the project.

Still in the first step, a diagram was drawn to understand the macro process of supplies(figure 2) and, for each of its sub-processes, a Process Scope matrix (figure 3) was developed to identify all relevant elements such as suppliers, inputs, processes, clients, objectives, process indicators, regulating standards and laws, systems used and the key players involved.



*Figure 2 – Supply Chain Processes (as is)*  
*Source: Developed by the authors*

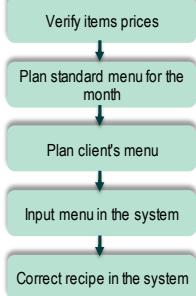
PROCESS SCOPE MATRIX		Plan items purchasing	
		Process owner:	Nutritionists
		Duration	4 weeks
STANDARDS		GOAL	
		Plan menu and amount of supplies needed for one month in order to meet clients contracts and reduce value meals.	
SUPPLIERS		DRIVERS	
Client			
INPUTS		OUTPUTS	
Client Contract		Month menu planned (in the system)	Purchasing analist
PROCESS		COSTUMERS	
FROM: monthly menu planning need			
			
TO: planned menu			
INVOLVED		SISTEMAS / INSTRUMENTOS	
Nutritionists and unit leaders		Own System, Microsoft Excel	

Figure 3 – Process Scope Matrix

Source: Developed by the authors

The analysis (the second step of the project) involved mapping the processes with the BPMN notation and surveying improvement opportunities for each of the processes identified in the previous step, i.e., Plan the Purchase of Items, Negotiate Items, Purchase Items, Receive Items, Transfer Items, Return Items, Register Suppliers, Monitor Suppliers, Register Products. Several opportunities for improvement were detected during the meetings and studies to map the process. Next, the improvements were detailed and their potential for gain was measured to be prioritized at the end. The prioritization was made using a prioritizing matrix considering the following variables: gain and ease to implement, rated as high and average gain and ease to implement, as show in Figure 4:

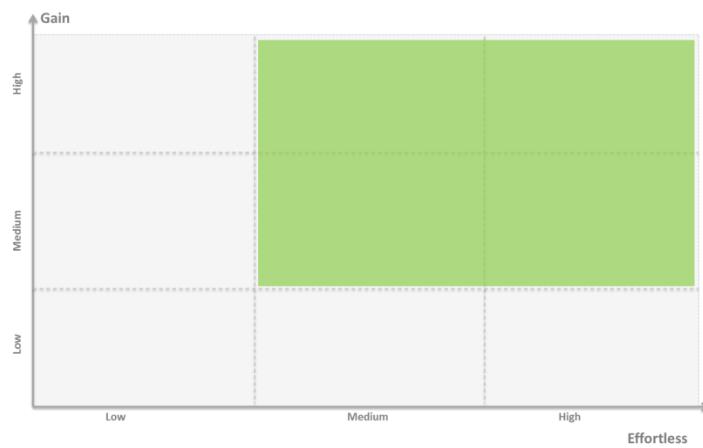


Figure 4 – Prioritizing Matrix

Source: Developed by the authors

The prioritized ideas were organized in three structuring solutions to the Supply process: Centralization of the negotiation and purchase; Standardization and quality of Supply; and Improvements to the System.

In the design step (the third step of the method used) a new macro process of Supplies was conceived to appropriately reflect the improvements to be implemented. At this step, once more each of the processes that compose the chain in Figure 5 was mapped in the BPMN notation to describe the operation of these processes on this diagram and make it easy to implement them.

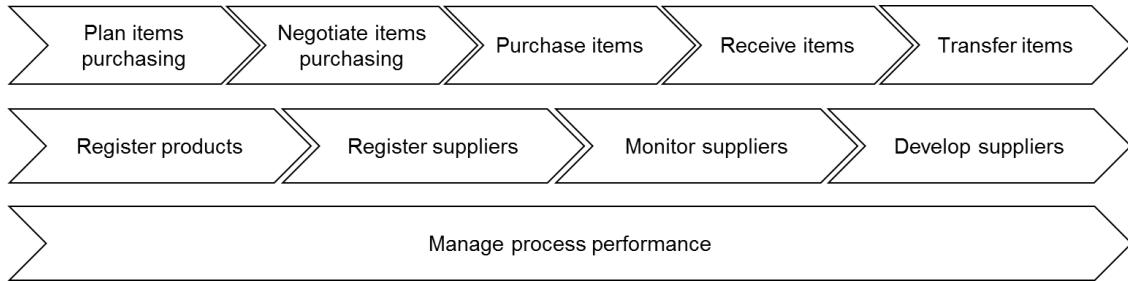


Figure 5 – Supply Chain Processes (to be)

Source: Developed by the authors

Besides the survey of each of the identified processes, which was the result of this step, performance indicators were defined as well as a routine for process monitoring and control, including definition of roles and responsibilities for this management and a timetable of meetings to analyze the results of the indicators.

With all the tools delivered in the three former steps, the implementation phase started with the development of a detailed action plan to determine activities, individuals in charge and deadlines for execution. The purpose was to ensure implementation of the structuring solutions as defined (Centralization of negotiation and purchase; Standardization and quality of supply; and Improvements to the System). Table 2 describes the key differences of the supply process before and after the implantation of the improvements structured in this research:

Table 2 - Comparison of the process before and after the implantation of the improvements

Characteristic of the Process	Before the project	After the improvements
Negotiation and Purchase	Many products were still negotiated and purchased regionally.	All portfolios will be negotiated and purchased at the corporate base, in a centralized manner.
Suppliers	Many suppliers were local and serve some units, which led to differences in prices between regional units.	Suppliers were selected to sign longer-term contracts with the organization to ensure lower prices and improved provision of services.
Menu	Each unit planned its menu, which made it difficult to make large purchases	Standardized menu designed by nutritionists from the corporate base with the help of buyers to ensure seasonal products with low prices are used.
System	System with no integration between the units and the corporate base. Therefore information was exchanged via reports, which made	A new system was implanted to integrate all units, making it easier to manage the units, the stocks and the negotiated values.

	management difficult.	
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*Source: developed by the authors*

The implementation of the structuring solutions led to attaining real financial and qualitative gains, as described in **Erro! Fonte de referência não encontrada..**

*Table 3 - Gains from the structuring solutions*

<b>Solution</b>	<b>Description of the gain</b>	<b>Potential of gain</b>
Centralization of the negotiation and purchase	By centralizing negotiations, the goal of 5% gain with negotiations from the corporate base will be taken into consideration in the portfolios under the responsibility of the regional units.	R\$600,000 in one year with the process stabilized
Improvements to the System	Automation of the steps of the process enables implantation of several improvements: 1) Attainment of the goal of 5% gain with negotiations for the already negotiated portfolios at the corporate base; 2) Elimination of the loss between the value quoted and the value paid; 3) Reduced lead time of the process	R\$1.5 million and reduction of 12 days of lead time in one year with the process stabilized
Standardization and quality of the supply	Standardization of the menu leads to increased planning capacity and reduces prices due to gain in scale with high qualitative gains.	

*Source: developed by the authors*

The potential gain, in spite of not being fully attained, has been proven to bring larger returns than the investments made to implant the improvements, which indicates that the project is successful.

## Final Considerations

The return attained with the improvement project in supply processes proved the impact that it had on the results of the network of industrial restaurants and met the objective of the research. The financial gains reflect directly on the profits of the business unit, whereas the qualitative gains increase the planning and managing capacity by promoting operational efficiency via efficient, integrated support processes that contribute to this strategic objective of the organization. Moreover, other actions directly impact strategic objectives, such as the partnership set with suppliers, which helps promote relationships with the market, and the implantation of a new system that integrates the units, since it favors availability of infrastructures and systems, which is the third strategic objective highlighted as the focus of this research.

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