STANDARDIZATION OF ADMINISTRATIVE PROCESSES: A CASE STUDY USING CONTINUOUS IMPROVEMENT TOOL

ABSTRACT

Goal: The goal of this research is to propose a system for the implementation of the standardization of processes, and for their continuous improvement and optimization in the administrative area of companies.

Design / Methodology / Approach: A system for the implementation of process standardization was proposed and carried out through stages for structuring each process.

Results: It was noticed that although no ideal model can be deployed in all organizations, there is a real necessity for companies that need tools to be used and adapted to the needs of each company.

Limitations of the investigation: It is worth mentioning the fact that this work was elaborated considering the specificities of the company and that the planning for the implementation of the necessary changes was performed, observing the particularities of the company.

Practical implications: The study demonstrates that with an organizational restructuring of the company, it is possible to structure internal and external processes, thus creating a faster and more accurate flow of information between departments and allowing lean management by eliminating obsolete and unnecessary processes. Another practical implication observed is the creation, control, and monitoring of indicators to achieve the results of the projected processes, as well as checking of the evaluation of these processes that can be maintained or changed according to the company's strategic planning.

Originality / Value: This article contributes to the strengthening of strategic knowledge aimed at the standardization of administrative processes for the continuous improvement of quality in the services of retail companies and can be applied in companies from emerging countries.

Keywords: Management; Production Management; Program Evaluation; Routing; Scheduling;
1. INTRODUCTION

According to current requirements, managers feel the need to learn new ways of running their businesses and to foster a team spirit where everyone contributes with their knowledge and experience. Based on this, it is necessary to continuously improve the productive and administrative processes in order to meet this need (Brandao et al., 2017; Wang et al., 2018; Perevozova et al., 2019; Purosottama and Ardianto, 2019).

The search for the improvement of production processes and the competition between companies, together with the demands of customers and consumers, has intensified the need for quality improvement (Cesconeto et al., 2014; Watson and Tytula, 1996). This search is the right way to strengthen the company’s competitiveness in the medium and long term (Singh and Singh, 2015; Ross, 2016; Ricco and Guerci, 2014). The intermediate activities executed at the organizational level are not directly related to the production of the final product. However, these activities provide the total cycle of an organization: from the raw material purchase to the financial results and balance sheet. Consequently, these activities require a continuous, safe, efficient, and effective process to validate and analyze the information (Silva Júnior et al., 2011).

Modern companies consider standardization as the most important of managerial tool (Cohen and Rozenes, 2017). Great researchers, such as Imai (1986), March and Simon (1958), and Shingo (1981) had this theme as their central concern. They suggested that standardization is an internal and continuous process of an organization. Moreover, Total Quality Management indicates that uniformity is essential for routine management and is a tool for achieving better results. Therefore, standardized processes provide routine management, ensuring greater productivity for an organization, structuring the flow from supplier process to result analysis, and achieving greater efficiency to the needs of each sector. The standardization process provides a visible and measurable improvement of the process, and efficient routine management (Singh and Singh, 2015; Skrynkovskyy et al., 2017). For the overall process to achieve its objectives, it is essential to act on micro-processes, focusing on the primary purpose of an organization.

The standardization and improvement of processes, products and services can be achieved through the participation and commitment of all employees of the organization. The adoption of a management system usually implies the standardization of an organization’s methods and practices. This is important to enable critical analysis and the consequent improvement of company procedures and methods, providing a concrete perspective of what to analyze and improve (Wright et al., 2012; Sumarto, 2017; Idzikowska, 2017; Lapchak and Zhang, 2018.)

Regarding confidentiality issues, this article will not name the case study ALPHA RETAIL GROUP. The organization did not have business cost assessment management and activity planning and procedures, generating unnecessary expenses, sector deprogramming, demotivation, and loss of productivity. Thus, the objective of this article is to implement the standardization process and routine work management in each department at the organizational level, establishing goals for each activity and applying administrative management tools, in order to achieve excellence in the provided services to internal and external customers. The goal is to propose a practical approach to guide organizations to implement standardization processes. The proposed framework for implementing the standardization process has five steps, as follows:

- Organizational Structure – to structure the organizational chart;
- Process Management – to identify and define each activity of each department;
- Routine Management – to identify and design the details of each activity;
- Indicators Management – to determine the assessment management for each indicator of each activity;
- Operational and Systematic Procedure – to elaborate the routine procedures and manuals for each operation.

With the structuring of the company and the indirect standardization of the processes of each department, the Engineering Managers will have a tool for monitoring and analyzing the productivity indexes of each employee, according to established goal for each one. Implementing standardization and defining the ideal model will enable the company to gain greater productivity in its processes, reduce costs and losses and the capacity to evaluate and monitor the performance of its employees.

2. THEORETICAL BACKGROUND

To bring an organization to excellent results, the manager must have an entrepreneurial spirit, accept challenges, take risks, and have a systematic sense of nonconformity to lead the company to a better situation (Porter, 1979; McMullen and Kier, 2017). The manager is expected to understand the technical side of the business as it relates to product design and manufacture, as well as the business side as it relates to satisfying customer needs profitably (Gorchels, 2003).
The external environment – a macro perspective – and the internal environment – a micro perspective – influence organization performance. The importance of standardization for an organization’s efficient results is becoming stronger nowadays (Singh and Singh, 2015). It is stated in Simon’s behavioral theory (1947) that the use of standardized procedures aims to reduce uncertainty.

2.1 Standardization of processes

The degree of absence in the variation of implementation practices defines standardization. According to Singh and Singh (2015), managers need to understand that the standardization process is one of the safest methods to improve productivity and competitiveness at the international level. It is also one of the foundations of modern management. By standardizing the system, organizational improvement is achieved by increasing technical capabilities, knowledge, business profits, and customer satisfaction (Pellicer et al., 2012).

Standardization is a continuous internal process that provides improvements for quality, cost management, compliance, and safe process (Shingo, 1981). It also facilitates the training process for new members, once the procedures and goals to be achieved are identified. Moreover, it provides high process confidence, avoiding organizational dependence on a specific employee. Furthermore, involving employees in the standardization process is vital for identifying the best way to execute a specific activity. Thus, the assessment process is more precise to everyone through the management of indicators (Forno et al., 2016).

Continuous improvement requires employees to constantly revise the current needs and procedures. Imai (1986) studied this concept of continuous improvement and suggested that, if the organization implements the process correctly, it will teach people to utilize methods for eliminating waste in the workplace. Moreover, standardization results from education, training, and delegation, according to an organization’s objectives (Chiarini and Vagnoni, 2017).

The whole organization involves processes. Thus, the primary purpose of process design is to ensure that its performance achieves the determined goal (Slack et al., 2010). The Cause and Effect Diagram is a methodology to define and establish a standardized process, which analyzes the necessity of each step of the process to contribute to the primary objective. Defining the goal and the necessities of a process is fundamental for standardization. To map the micro-processes and how each activity is related to one another is very important for designing a procedure. Moreover, it is essential to identify the different types of activities, and the flow of materials, people or information (Slack et al., 2010).

Diverse organizations desire to standardize their processes, but do not know how to do that. Additionally, organizations that are structured by tasks and not by processes need to re-design all their processes, leading organizations to interrupt the implementation of standardization because they are not confident in terms of how to implement it (Chiarini and Vagnoni, 2017). The processes analysis implies identifying different dimensions of processes: flow, the sequence of activities, waits and cycle duration, data and information, people involved, and relationships between the activities. The macro-processes can be subdivided into micro-processes or groups of activities (Forno et al., 2016). Moreover, the standardization process considers technological, personal and structural aspects. There is no defined model, but there are tools that facilitate the structure and implementation of process management through standardization. Process management is common in industrial organization. However, it is not common in the services organizations (Falcão et al., 2017).

2.2 BPM – Business Process Management

Business Process Management (BPM) combines software resources and management knowledge to accelerate the improvement of an organization’s process and facilitate its innovation. BPM also assists in the achievement of strategic objectives and the efficient implementation of processes throughout the organization. Its focus is on top level and bottom line success through vertical integration and optimization work, diverging from traditional management lines such as the functional ones that do not focus on an integration process. BPM also seeks continuous process improvement, increasing the organization’s competitiveness (Roland, 2009).

BPM is a systematic approach to improve an organization’s business processes which are the set of coordinated activities and tasks performed by people to achieve the organizational goals and objectives. From a process perspective, Business Process Management is regarded as a best practice management principle to help companies sustain a competitive advantage. Process Alignment and People Involvement are two critical concepts for the successful implementation of Business Process Management (Hung, 2011; Hoang et al., 2013; Alotaibi and Liu, 2016). This tool is used in an organization to operate on its internal processes, strategic processes, and people and responsibility management. This methodology focuses on an organization’s processes in order to achieve continuous improvement.

2.3 Routine management

In their studies, March and Simon (1958) treated organizational routines as simple rules for organizing the envi-
ronment. Within this context, standard procedures would be developed to improve process efficiency and assist decision-making. Organizational routines are increasingly theorized as recursively constituted as structures that inform and influence human action, while simultaneously being built from the bottom up by individual activities (Styhre, 2017).

Regarding routine work, there is a repeated and cyclical section called the activity task. The first step to analyze a routine work is to separate the task into elements and isolate the compatible central part of the auxiliary tasks. It is important to identify common and repeatable tasks since the purpose of this identification is to group the items with the highest repetition frequency and the shortest variation time (Liker and Meier, 2007). Geramian et al. (2017) suggest that the PDCA methodology is the best tool to manage established procedures. The Planning, Do, Check and Action (PDCA) methodology intends to manage repetitive processes, establishing a working standard for each stage, from the initial stage of the project to its final product. This methodology also includes explanations on how to verify inconsistencies, how to identify their causes, and how to correct them.

Although many organizations acknowledge the importance of standardizing processes for efficient process management, most of them consider its implementation burdensome. A process-based restructuring implementation first requires an understanding of the primary organization’s processes. Then, to analyze the current situation, detail the executed process, each stakeholder involved and the required information are identified, and results are expected. According to Harmon (2007), any system emphasizes that everything connects to something. Thus, the routine management is a tool that will allow controlling the processes and the transfer of information from one micro process to another.

### 2.4 PDCA Methodology

Deming (1982) assisted Japanese industries to recover economically from the devastation of World War II. He searched for methods to improve the process itself, resulting in good quality products. Together with Joseph Juran and Armand Feigenbaum, he refined the PDCA cycle. This method is characterized by having a focus on continuous improvement (Silva et al., 2017). In their studies, Gorenflo and Moran (2009) report that the PDCA method consists of four steps, as follows:

1. **PLAN** – to define the goals and to elaborate an action plan to achieve them;
2. **DO** – to implement and monitor the action plan;
3. **CHECK** – to validate the results;
4. **ACTION** – if the results do not achieve the established goals, to initiate a new cycle of the PDCA method;

According to Silva et al. (2017), an organization requires an operational guideline to manage its activities. Thus, the PDCA method provides a daily work routine management as well as a continuous improvement of the existing processes.

### 2.5 Training and development

Organizations are always looking for consistent and positive results. The key to that is the development of talent and routine work definition. Therefore, standardization helps employees develop the knowledge and talent they need. According to the Toyota method, standardized work is the foundation for efficient and productive working methods. Defining standardized work requires the ability to evaluate the overall process focusing on training and separate it into the most critical elements (Liker and Meier, 2007).

Defining activity during the standardization process provides an execution guideline. Consequently, it is possible to implement the training process as it is complicated to teach an activity that does not have a defined method of execution (Liker and Meier, 2007). Transforming and improving employee efficiency is the biggest challenge organizations face. Modern processes require strong individual skills to execute them. For a long time, organizations have not acknowledged the value of training their workers as a tool for reducing errors and production costs. Nevertheless, organizations are currently recognizing the training process as resources for such improvement (Alotaibi and Liu, 2016).

### 3. METHODOLOGY

Scientific research needs a set of intellectual and technical procedures to acquire scientific knowledge (Gil, 2010). This way, this research can be classified in several ways. As for the research objective, it can be characterized as applied, since the study in question aims to solve problems identified within societies, helping to expand scientific knowledge and proposing new discussions to be investigated (Miguel, 2018).

As for the approach to the problem, the research is qualitative, as Miguel (2008) is the person who researches the partner and starts his statements about pragmatic elements. As for the objective, it is described as descriptive, as it aims to describe the characteristics of a group determined to identify possible relationships (Gil, 2010).
Regarding the method, this research can be classified as bibliographic to verify the gap in the literature (Miguel, 2018). Therefore, the literature review was developed to understand the background of the management process and continuous improvement, focusing on an organizational structure and routine management processes.

The research can also be classified as a case study, which, according to Yin (2017, p. 32), “is an empirical investigation that aims to study a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and the context are not clearly defined. Thus, this type of research seeks to study in-depth one or more research objects that allow the development of scientific knowledge.”

A case study was developed in a retail organization. The group started its activities with only one retail store, with several products, with monthly average revenue of R$ 10,000.00, for more than thirty years. It was a well-structured family with operations in the agricultural environment that saw the opportunity to enter the retail trade. Following the store opening experience, owners have identified an opportunity to represent nationally known brands through franchises.

They closed the first store mentioned and, in 1982, they opened the first store of a well-known franchise across the country, starting activities with the goal of creating a large brand representation group. Today, RETAIL X GROUP represents three reputable and accepted brands in Brazil, reaching a monthly sales average of R$ 4,000,000.00, with approximately 210 employees and 26 stores in total, with plans to open four more stores.

With a very aggressive commercial vision, the group has grown a lot over the last ten years, now needing to structure its rear to meet the demands of its business, with reliability in processes and information. RETAIL X GROUP did not have effective control of its processes, which caused much waste, loss, lack of information and general lack of control. Therefore, it began an investment process in its rear, in technological resources, infrastructure, and people, starting the group standardization project.

Thus, it sought to structure the methodology focuses on both the organizational structure and routine management and follows the activities described below:

- Organizational Structure - to evaluate and create a new organizational structure that meets the needs of the organization: mapping the processes, analyzing the division of the activities, and structuring the team;

- Process Management - to evaluate the processes of each division, analyzing the responsibilities and standards for each one of them. This study calls each division BMU – Basic Management Unit;

- Routine Management - to define and describe each activity. This study calls the activities as the product, illustrating the flowchart and the connection between the former and current activities;

- Indicators Management - to determine the indicators of measurement/ performance for each activity;

- Operational and Systematic Procedures - to formalize and promote the procedures of each division, elaborating the manuals for each activity.

Figure 1 demonstrates the case study methodology. The figure shows the methodology of the case study developed in five pillars: Organizational Structure, Process Management, Routine Management, Indicators Management, and Operational and Systematic Procedure. These pillars will be developed in practice throughout this article.

4. CASE STUDY: ALPHA RETAIL GROUP

The ALPHA RETAIL GROUP operates in the retail segment of perfumes, cosmetics, footwear, and accessories for more than thirty years. The organization analysis, described below, is divided into the following sections: organizational structure, process management, routine management, and indicators management.

4.1 Organizational Structure

The organization has grown progressively in Northeast Brazil, becoming an exclusive franchise of three popular fashion and cosmetic brands in this region. The organization had two main branches: Administration and Commercial, with the corresponding directors at the top. The commercial branch is responsible for coordinating the product orders with the three suppliers: store management activities, sales productivity, and marketing strategies. In general, because of the guidance and standards of the three franchises, it was able to work effectively.

However, the administration branch was too small to assure the management of the financial, logistics, human resources, technology, and legal departments. The company’s strong commercial expertise was the reason for its growth, but the lack of internal control precluded the organization from making the practical analysis of the real state of its results, losing market opportunity and profitability. As a fran-
chise, the organization has restrictions set by the franchisors such as the minimum stock of certain products and the fixed sale prices. The company, therefore, has a few options on how to control profitability: the sales strategy and operating costs.

Moreover, the division between the two branches was unclear: the relationship between the directors and staff was confused due to a lack of clear direction or instruction. In some cases, the work was divided based on friendship or confidence rather than an organizational structure. Additionally, both directors gave instructions to everyone, and it was unclear for the staff to which director they should report their activities. Moreover, the goals of each department were vague. On the above organizational structure, the departments did not have any defined process or team distribution. The organization was able to execute the requirements of the franchisors but did not have internal controls of its profitability and management process. Figure 2 demonstrates the above organizational chart of the organization. This study focuses on the administrative branch.

The proposed organizational structure takes into consideration the feedback system principles: each department receives an input from another department, processes its activities, and delivers an output to another department. It was also considered the required qualifications of the team. The feedback system allows specifying the process of each department sharing responsibilities without departing from their obligations. And this new organizational structure is closely related to the context in which it works, as reported by Pugh et al. (1969). Figure 3 represents the proposed organizational structure to elaborate the processes of the organization, and Table 1 describes the responsibilities of each position in the new organizational structure.

Furthermore, the technical skills and the required qualifications were analyzed for each position. Then, a recruitment company was contracted to select the best candidates to fill all the new positions. For a productive organizational change encompasses structure, strategy, style, skills, and, especially, the team (Waterman et al., 1980). Moreover, some of the former employees were resistant to the new responsibility and did not consider the value of the changes, which made them eventually leave the company.

4.2 Process Management

Following the new organizational structure, the next step is to identify a Basic Management Unit (BMU) for each department. The objective of BMU is to elaborate an individual organization management for each department, providing a clear understanding of the departments’ processes. The team would visualize its unit as a unique “company” that needs suppliers (information from another department) and generate a product delivery (information to another department). The team would have the feeling of being the owner and responsible for the results of its unit. Each department created its BMUs using the 5W1H tool (what, why, who, where, when, how). The eight BMUs registered for the organization is in Appendix A and B.
**Figure 2. Former Organizational Structure**

**Figure 3. Current Organizational Structure**
The Basic Management Unit identification provides an opportunity to evaluate individual activities and review their importance. This process has canceled diverse activities considered obsolete and has identified the necessity to elaborate new processes as well as it has relocated some activities to another department or BMU.

4.3 Routine Management

Following the BMUs analysis, the next step is to create the products of the BMU. Based on the initial analysis of each activity of the BMU, it is important to analyze in detail the workflow, the requirements, and the delivery of each activity, named product in this study. The idea of analyzing the activity as a product of the BMU is to visualize the BMU as a company and identify the “suppliers” (the department from which the BMU requires information) and the clients (the department to which the BMU will deliver information). This methodology creates a productive cycle where each BMU identifies the needs of the next BMU. This routine management provides a detailed workflow of the product of each BMU, evaluating the aspects that are impacted and impact another activity.

In this stage of the project, because of the level of details required, the participation of the board was significant because of the complicated process involved in this activity. Employees were required to do extra work, once they could not interrupt the daily operation and have an essential role in describing the activity in detail. Therefore, constant motivational incentive, reinforcing the importance of this step, becomes essential to the success of this stage of the project. Appendix C demonstrates one of the products designed by one of the departments of the case study.

Products provide an opportunity for each department to evaluate individual activities and the time spent to execute them. As a result, the BMUs identify their needs and how they need to deliver the activity. It is also possible to identify the connection among the BMUs and each one has the knowledge of its products and how they impact on the other BMUs. Communication is smoother and more precise between BMUs.

4.4 Indicators Management

Following the BMU’s product identification, the next step is to identify how to assess the indicators and how to present their results to the stakeholders. Table 2 demonstrates the implemented form to identify the details of each indicator.
### Table 2. Indicator Assessment Form

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<tr>
<th>BMU:</th>
<th>Responsible:</th>
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<tr>
<th>Name of the Indicator</th>
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<tr>
<td>Customer</td>
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<tr>
<th>Description and Meaning of the indicator</th>
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<tr>
<th>Who Meets</th>
<th>Measurement Unit</th>
<th>Measurement Periodic</th>
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<tr>
<th>Expected Performance</th>
<th>Calculation</th>
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<th>Graph (Presentation Format)</th>
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<tr>
<th>Action Carried out after Indicator Measurement</th>
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<tr>
<th>Action Plan</th>
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</table>

**BMU** – to identify the Basic Management Unit – BMU;

**RESPONSIBLE** – to identify the responsibility for executing the activity;

**NAME OF THE INDICATOR** – to identify the indicator;

**CLIENT** – to identify who will receive the results of the indicator;

**DESCRIPTION AND MEANING OF THE INDICATOR** – to describe the indicator and the importance of that;

**WHO MEETS** – to identify who measures the indicator;

**MEASUREMENT UNIT** – to identify the measurement unit of the indicator;

**MEASUREMENT PERIODIC** – to identify the frequency of the indicator measurement;

**EXPECTED PERFORMANCE** – to identify the indicator’s goal;

**CALCULATION** – to identify how to calculate the results;

**GRAPH (PRESENTATION FORMAT)** – to identify how to present the indicator;

**ACTION PLAN FOR INDICATOR IMPROVEMENT** – in case the indicators do not achieve its goal, to elaborate and present an action plan for that.

During the analysis of the indicator’s assessment, the team has a clear idea of how to evaluate the activity and what the company expects from them. Appendix D demonstrates one of the indicator assessments designed by the case study organization.

### 4.5 Systematic and Operational Procedure (SOP)

Following the underlying implementation, it is necessary to formalize the processes, so all the employees have access to the organization’s procedure. Moreover, the new employees have access to detailed and technical information on what they need to execute and are aware of the requirements of each activity. The official document of the organization follows the standard illustrated in Table 3, called SOP (Systemic and Operational Procedure), and Appendix E demonstrates one of the SOPs designed by the case study company.
Table 3. Systemic and Operational Procedure Form (SOP)

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<tr>
<th>LOGO</th>
<th>Systemic and Operational Procedure SOP __________ - Procedure’s name</th>
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<tr>
<td></td>
<td>Review:</td>
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<td></td>
<td>Date:</td>
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<td></td>
<td>Page:</td>
</tr>
</tbody>
</table>

1. Objective

2. Responsible

3. Guidelines

4. Approval

Prepared by: | Approved by | Date

SOP __________ - PROCEDURE’S NAME — to identify the Systemic and Operational Procedure code and the name of the process. The first three numbers represent the Basic Management Unit - BMU, and the last three numbers a sequence;

REVIEW – to identify the version of the document;

DATE – to identify the date the current review is activated;

PAGE – to identify the page of the document;

OBJECTIVE – to identify the objective of the process and the importance of it;

GUIDELINES – to describe each step of the process;

APPROVAL – to identify who approved the document: responsible for the sector and its immediate superior;

PREPARED BY – the signature of who elaborates the document;

APPROVED BY – signature of who approves the document;

DATE – date to promote the document.

This step allows formalizing all the process of the organization. Furthermore, the documentation allowed training new employees, becoming the process clear to all the members.

The improvements seen in the case study company with the application of process standardization are close to those found by Wanzeler et al. (2010), in a furniture sector company. They pointed out that process standardization brought higher productivity for the company studied and provided even greater systematic and continuous control of operations.

Manchini (2019) points out in his studies the importance of measuring indicators and application in the management routine, and suggests, as an improvement to the studied company, the implementation of the complete PDCA cycle, for process management, indicator monitoring, and continuous improvement.
The results found by Moura and Nunes (2019) indicate that process standardization is efficient not only in the process itself but also in reducing costs and ensuring process reliability, which generates savings for the company that adopts this management model.

5. CONCLUSION

The methodology used to implement changes in a company is as important as the implemented tool, since the greatest difficulty is not its understanding or knowledge, but the expenditure and persistence in the implementation of the tool.

This article aims to demonstrate the methodology used to implement the ALPHA RETAIL GROUP’s strategic knowledge strengthening and the expected results of its implementation, aiming to standardize administrative processes for the continuous improvement of the quality of retail services and can be applied to retail companies in emerging countries.

ALPHA RETAIL GROUP managed the activities at the organizational level exclusively through the Senior Directors and had little or none coordination among its staff before the restructuring process. The organization did not have clear internal workflows and followed the processes imposed by the franchisors only to satisfy their requirements. This lack of management process generates confusion within employee tasks, re-work, and adverse effects on the results of the organization.

The methodology used to restructure the ALPHA RETAIL GROUP has demonstrated to be very efficient, resulting in increased motivation and involvement of the team, and improved the results of the organization.

However, although the implementation of the project was successful, it required the substantial participation of the board. It also provided stressful moments when the team needed to be changed, causing emotional stress to the current team.

The new structure drastically changed the operating management system of the organization. Store management and sales staff remain consistent and follow the same coordination mechanisms of the franchises. The most significant change is in the management of the activities at the organizational level, having an apparent distribution of the activities.

Previously, the departments did not have goals and explicit coordination. The new structure allowed the departments to have goals and assessment management for their indicators. The organizational structure, plan, execution, and control were the primordial and essential characteristics for implementing the entire project.

Reinforcing the importance of this research is necessary. An organization can follow this methodology to improve processes and management process. The methodology has shown to be efficient and provide excellent results in the management process, improving the results of the organization.

The main contribution of this research was through the case study, in which small, medium and large companies can make use of simple tools for daily improvement. It is believed that the results found were a consequence of the characteristics of the case study and cannot be generalized.

5.1 Implications for Engineering Managers

The check and action steps of the PDCA tool are significant so that the implementation of the restructuring project achieves its primary objective: to seek the continuous improvement and optimization of the processes executed by the Engineering Managers.

Monitoring allows Engineering Managers to ensure that processes met, and, at each presentation of results, can be evaluated utilizing a quantitative method, which can be improved, seeking more significant challenges.

To guarantee the success of the project, it is fundamental to keep the processes developed by analyzing the issues that need to be addressed through monitoring and corrective actions or improvements. Checking and acting are essential actions for the continuity of the project of continuous improvement and optimization of processes. Without this methodology executed by the managers, the continuity of the work implanted will be lost over time.

5.2 Limitations and difficulties

As a limitation, it should be highlighted the fact that this research was elaborated taking into consideration the specificities of the studied company and that the planning of the implementation of the necessary changes was made observing the needs of the company and its particularities. The proposed approach can be applied to other companies, provided that the specificities of each case are respected.

Since the beginning of this research, the application of the approach has faced many daily difficulties. The biggest one was related to the structuring of people. The group did not have a team that met the project requirements, which generated a greater expense at this stage and had to revise
the implementation period, which initially lasted from one and a half to two years.

After structuring the team, the biggest difficulty was focusing on the implementation of the project stages, because, as there were no well-aligned processes, the daily routine consumed the time of all employees. It has always been necessary to carry out awareness and motivation work so that the project does not fall into disbelief or delay the sending of the necessary information for the elaboration of each process.

5.3 Suggestions for future work

As a continuation of this research, it is suggested for the company:

- Profit-sharing methodology, according to the achievement of the goals of each indicator, acting motivationally in the administrative sector, as well as used in the productive and commercial sector.

- Recording and registering the objective and deadline processes of each BMU, which is accompanied by a specific BMU in monitoring results.

- Implementation of the 5S tool for document organization and ease of information transport.

As a continuation of this research, it is suggested to the academy:

- Model for the implementation of quality tools in small retail segments, as it has the largest number of players in Brazil.

- Results management model, coupling the company’s results to the individual results of each employee, analyzing quantitative and qualitative achievements through characteristics identified as important to professionals in the area.

REFERENCES


Gorenflo, G.; Moran, J. W. (2009), The ABCs of PDCA, Accreditation Coalition, Minnesota, USA.


Shingo, S. (1981), Study of Toyota Production System from Industrial Engineering Viewpoint (Tokyo, Japan Management Association).


### APPENDIX A - ALPHA RETAIL GROUP BMUs

<table>
<thead>
<tr>
<th>USG</th>
<th>Process</th>
<th>WHAT</th>
<th>WHY</th>
<th>WHO</th>
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<th>WHEN</th>
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</tr>
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<tbody>
<tr>
<td>TREASURY</td>
<td>Cash Office</td>
<td>Treasury balances and income process and record regarding cash and credit card receipts</td>
<td>To guarantee the conference of the store cashiers and cash deposit</td>
<td>Treasurers</td>
<td>Central Office</td>
<td>Daily</td>
<td>To receive the cashier report and documents from the stores; To confer cash and credit card receipts with the sales report, to deposit cash; To reconcile the bank.</td>
</tr>
<tr>
<td></td>
<td>Bank Reconciliation</td>
<td>Credit and debit conference</td>
<td>To verify the credits, debits and financial fees in the account bank</td>
<td>Treasurers</td>
<td>Central Office</td>
<td>Daily</td>
<td>To validate the credit and debit from the previous day; To register credit and debit in system; To check possible divergences; To request a solution for mistakes.</td>
</tr>
<tr>
<td>BILLS TO PAY</td>
<td>Payments</td>
<td>Make payments</td>
<td>Make payment according to cash flow schedule on due maturity, avoiding delays, interest and/or fine.</td>
<td>Accounts Payable Analyst</td>
<td>Bills to pay</td>
<td>Daily</td>
<td>Close payment schedule of the day and register the titles for payment. Monitor the discharge of the board of directors and validate payments made. Reconcile and archive payment vouchers made on the previous day.</td>
</tr>
<tr>
<td></td>
<td>Cash flow</td>
<td>Reconcile payments made from the previous day, check balance and payments on the day</td>
<td>Validate if all payments were made through the bank balance, guaranteeing their effectiveness and deposit of checks in due maturities.</td>
<td>Accounts Payable Analyst</td>
<td>Bills to pay and treasury</td>
<td>Next Business day</td>
<td>Inform the treasury of the current value of the payments made on the previous day. For debit departure and conciliation of their effectiveness. Send balance of payments on day to release them</td>
</tr>
<tr>
<td>BILLS TO RECEIVE</td>
<td>Conciliation receivable X received</td>
<td>Acceptance of credit card receipt, pre-dated checks</td>
<td>Validate receipt scheduling with what has been accomplished, guaranteeing receipt of all scheduled credits and deposits of checks in due maturities.</td>
<td>Accounts Payable Analyst</td>
<td>Bills to Receive</td>
<td>Daily</td>
<td>Withdraw receipt report from the previous day. Value received. Charge for possible divergences. Accounting for receipt write-off. Low file.</td>
</tr>
<tr>
<td></td>
<td>Shipping and delivery of PJ titles</td>
<td>Send shipment of securities and track shipments</td>
<td>Ensure tracking of the title. Avoiding undue protests and charging defaulters</td>
<td>Accounts Receivable analyst and financial assistant - Accounts Receivable</td>
<td>Bills to Receive</td>
<td>Daily</td>
<td>Receiving promissory notes and scheduling remittance to due dates, posting security data according to the report for the day, generating remittance of securities, generating a return receipt report, writing down receivables, tracking delinquencies, and collecting bills</td>
</tr>
<tr>
<td>BMU Registration - Alpha Retail Group</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>--------------------------------------</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>USG</strong></td>
<td><strong>Process</strong></td>
<td><strong>WHAT</strong></td>
<td><strong>WHY</strong></td>
<td><strong>WHO</strong></td>
<td><strong>WHERE</strong></td>
<td><strong>WHEN</strong></td>
<td><strong>HOW</strong></td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
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<td>---</td>
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<td>---</td>
</tr>
<tr>
<td>Logistics</td>
<td>Inventory Control in the Matrix and stores</td>
<td>To ensure that the stock is safe. In order to avoid waste or loss of validity and/or deviation</td>
<td>Logistics Coordinator</td>
<td>All stores and headquarters</td>
<td>Daily</td>
<td>To confirm registration of the products in the system. To visit stock of stores. To inventory and to analyze possible differences of stock through inventory system. To report results to the director</td>
<td></td>
</tr>
<tr>
<td>Logistics</td>
<td>Transfer of goods between stores with accompanying logistics manager</td>
<td>To meet the demand of the commercial area as a matter of urgency</td>
<td>Logistics Coordinator and Logistics Assistant</td>
<td>All stores and headquarters</td>
<td>As needed</td>
<td>To receive request from the manager. To analyze requirement. To request authorization from the board of directors. To report event to the directors (Financial and Commercial)</td>
<td></td>
</tr>
<tr>
<td>ICT - Technology, Information and Communication</td>
<td>Software user registration in the software</td>
<td>Assurance of processing storage and availability of group information</td>
<td>TIC coordinator</td>
<td>Group as a whole</td>
<td>Daily</td>
<td>To register user in the company's software, according to the profile determined by the RHGC department</td>
<td></td>
</tr>
<tr>
<td>ICT - Technology, Information and Communication</td>
<td>Software license update</td>
<td>To ensure that the update is according to the schedule and that the employees are trained according to changes and to software license update</td>
<td>TIC coordinator</td>
<td>Group as a whole</td>
<td>When necessary</td>
<td>To provide the most recent versions of software. To update the software. To train the employees for changes. To register software licensing when needed</td>
<td></td>
</tr>
<tr>
<td>Selection Process</td>
<td>Candidate selection for positions available</td>
<td>To select the candidates according to vacancy available and schedule an interview with the requesting sector</td>
<td>Human resources coordinator</td>
<td>Human resources and contract management</td>
<td>As needed</td>
<td>To receive staff requests. To collect board approval. To develop psychologist test with the candidate. To schedule interviews with applicants. To select the best candidate. To schedule as interviews with the requesting sector. To receive candidate approval</td>
<td></td>
</tr>
<tr>
<td>Hiring Process</td>
<td>Employee documentation registration according to the labor law</td>
<td>To attend labor law and group procedure</td>
<td>Human resources coordinator</td>
<td>Human resources and contract management</td>
<td>As needed</td>
<td>Receive hiring approval, conduct an interview, and collect required documentation. Register new employee, register new employee for group systems, present collaborator to the group office.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C - ALPHA RETAIL GROUP PRODUCT

LOGO

BMU: ACCOUNTS INCOME
RESPONSIBLE: ACCOUNTS ANALYST

DATE

PRODUCT

Income Reconciliation

(1st Quadrant)
Customers (Internal and external)

Stakeholders, Board of Directors, Financial Managements and Accounting

(2nd Quadrant)
Customers Requirements

Reliability of information, Daily reconciliation and Forecast X Realized

(3rd Quadrant)
Indicators of Requirements

95% of the cards reconciled and Credits reconciled in 3 days

(4th Quadrant)
Suppliers (Internal and external)

Bank, Card Operators and Group Operating System (software)

PROCESS - FLOW

<table>
<thead>
<tr>
<th>Description</th>
<th>Operation</th>
<th>Transport</th>
<th>Audit</th>
<th>Wait</th>
<th>Storage</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>To generate the credit card report of the operators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/2 day</td>
</tr>
<tr>
<td>To generate the credit card report of the Group’s Operating System</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 min</td>
</tr>
<tr>
<td>To reconcile operators credit card report and group credit card report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 h</td>
</tr>
<tr>
<td>To generate the credits bank report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 min</td>
</tr>
<tr>
<td>To reconcile credit deposited and operator report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 min</td>
</tr>
<tr>
<td>To file reconciliation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 min</td>
</tr>
</tbody>
</table>

Total Time Estimated for the end of the Process: 2 days

SUBTITLE

- OPERATION - UBG action
- Audit - Validation of the process/documentation
- Storage - storage product or document file
- Transport - transportation of product/document from one UBG to another
- Wait - wait time for release by another UBG (specify UBG provider)
### APPENDIX D - ALPHA RETAIL GROUP INDICATOR ASSESSMENT

<table>
<thead>
<tr>
<th>LOGO</th>
<th>Indicator Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMU:</td>
<td>Account Income</td>
</tr>
<tr>
<td></td>
<td>Responsible:</td>
</tr>
<tr>
<td></td>
<td>Account Analyst</td>
</tr>
</tbody>
</table>

**Name of the Indicator**

Credit card reconciliation

**Customer**

Board of directors and financial management

**Description and Meaning of the Indicator**

The credit cards reconciliation is executed daily and presented monthly to the stakeholders. The percentage of credit card reconciled guarantees that the expected are credited in the account bank...

<table>
<thead>
<tr>
<th>Who Meets</th>
<th>Measurement Unit</th>
<th>Measurement Periodic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Analyst</td>
<td>Percentage (%)</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

**Expected Performance**

- **Calculation**
  - 95%
  - Amount of reconciled credit x 100 amount of credits

**Graph (Presentation Format)**

![Graph showing reconciled and unreconciled credit percentages.](Image)

**Action Carried out after indicator Measurement**

<table>
<thead>
<tr>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>What?</td>
</tr>
<tr>
<td>Why?</td>
</tr>
<tr>
<td>Who?</td>
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<tr>
<td>Where?</td>
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<tr>
<td>When?</td>
</tr>
<tr>
<td>How?</td>
</tr>
<tr>
<td>How Much?</td>
</tr>
</tbody>
</table>
APPENDIX E – ALPHA RETAIL GROUP SYSTEMATIC AND OPERATIONAL PROCEDURE

<table>
<thead>
<tr>
<th>LOGO</th>
<th>Systemic and Operational Procedure SOP001.005 - Conciliation of Credit / Debit Cards</th>
<th>Validity: 01/2019</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Version: 01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page: 1/1</td>
</tr>
</tbody>
</table>

1. Objective

Credit card reconciliation. The credit card reconciliations is executed daily and presented monthly to the stakeholders. The percentage of credit card reconciled guarantees that the expected credits are credited in the account bank.

2. Responsible

Account Analyst, Administrative Financial Management, Administrative Financial Department

3. Guidelines

3.1 Account Analyst reports the incomes two days in advance of the due date;

3.1.1 To generate the credit card report from all the credit card operations;

3.1.2 To generate Group credit card report, separated by card operator;

3.2 Account Analyst reconciles the income from the credit/debit card operators and the group income report;

3.2.1 If there is a divergence in the forecast of receipt, the Accounts Receivable Analyst will perform maturity adjustment of the security in the group system;

3.2.2 Identifying divergence and finding unmatched security maturity; Accounts Receivable Analyst will adjust security maturity in the group system;

3.3 On the date of receipt, Accounts Analyst issues a bank statement to check the receipt provision x bank credit;

4. Approval

APPROVAL I: Administrative/Financial Manager

<table>
<thead>
<tr>
<th>Prepared by</th>
<th>Approved by</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>21/12/2018</td>
</tr>
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Received: 11 Mar 2019  
Approved: 17 Oct 2019  
DOI: 10.14488/BJOPM.2019.v16.n4.a15  