

Aplicação de indicadores de gestão de tempo para aumento de performance de consultorias

Application of time management indicators to increase the performance of consultancies

Aplicación de indicadores de gestión del tiempo para aumentar el rendimiento de las consultorías

Recebido: 05/06/2020 | Revisado: 12/06/2020 | Aceito: 23/06/2020 | Publicado: 05/07/2020

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Resumo

O objetivo do estudo de caso visa descrever a implementação de melhorias na área de *back-office*, assim viabilizando o aumento da performance na execução de demandas e entregas aos clientes internos e externos de uma empresa de consultoria de pequeno porte localizada em São Paulo, capital. Por meio da aplicação de um plano de ação 5w2h e conceitos da gestão do tempo, juntamente de outras metodologias como *mind map* para identificação de gargalos e BPA (*Business Process Analysis*) para modelar fluxos de trabalho existentes e viabilizar melhorias sistêmicas, estabelecendo metas e indicadores para mensurar os ganhos finais da implementação na organização, trabalho implantado e acompanhado durante dois meses. Os resultados obtidos durante o trabalho, tais como o aumento em 14% da capacidade de entrega, diminuição em 18% a taxa de retrabalho e 16% de entregas fora do prazo, esclarecem a importância e a viabilidade de aplicações de tais conceitos em áreas que tratem de entregas, assim ressaltando a relevância das melhorias contínuas para a evolução organizacional,

estratégica e competitiva no mercado. Os impactos positivos deste trabalho permeiam a organização, o grupo de pesquisa e a instituição onde esse se insere.

Palavras-chave: Gestão de tempo; Indicadores; Performance; 5w2h's; Consultoria.

Abstract

The objective of the case study is to describe the implementation of improvements in the back-office area, thus enabling the increase of performance in the execution of demands and deliveries to internal and external clients of a small consulting company located in São Paulo, the capital. through the application of a 5w2h action plan and time management concepts along with other methodologies such as mind map for bottleneck identification and BPA (business process analysis) to model existing workflows and enable systemic improvements, setting goals and indicators to measure the final gains of the implementation in the organization, work deployed and monitored for two months. the results obtained during the work, such as a 14% increase in delivery capacity, 18% reduction in rework rate and 16% in late delivery, clarify the importance and feasibility of applications of such concepts in areas that deal with deliveries, thus highlighting the relevance of continuous improvements to the organizational, strategic and competitive evolution in the market. the positive impacts of this work permeate the organization, the research group, and the institution where it is inserted.

Keywords: Time management; Indicators; Performance; 5w2h's; Consulting.

Resumen

El objetivo del estudio de caso tiene como objetivo describir la implementación de mejoras en el área de back-office, permitiendo así un mayor rendimiento en la ejecución de demandas y entregas a clientes internos y externos de una pequeña empresa de consultoría ubicada en Sao Paulo, capital. a través de la aplicación de un plan de acción de 5w2h y conceptos de gestión del tiempo, junto con otras metodologías como el mapa mental para la identificación de cuellos de botella y BPA (análisis de procesos de negocio) para modelar flujos de trabajo existentes y permitir mejoras sistémicas, estableciendo metas e indicadores para medir las ganancias finales de implementación en la organización, trabajo implementado y monitoreado durante dos meses. , disminuir en un 18% la tasa de reelaboración y el 16% de las entregas obsoletas, aclarar la importancia y viabilidad de las aplicaciones de dichos conceptos en áreas que se ocupan de las entregas, destacando así la relevancia de las mejoras continuas para la evolución organizativa, estratégica y competitiva en el mercado. los impactos positivos de

este trabajo impregnan la organización, el grupo de investigación y la institución donde se inserta.

Palabras clave: Gestión del tiempo; Indicadores; Rendimiento; 5w2h;s; Consultoría.

1. Introduction

Because of the speed of how information circulates, several companies seek specialized consultancies to stay up-to-date, competitive and have a better cost-benefit ratio on their work platform. The consulting activity is usually aligned with the strategic planning of client companies, to enhance the service to their strengths and identify risks to be minimized.

According to Pérez-Rave and González-Echavarría (2018), in schools, teamwork was stimulated to obtain improvements from technical knowledge, reliable methodology, and validity, where according to Rodrigues, Filippetto and Barbosa (2019) and Santos et al (2020b) time management stands out among the areas of knowledge in project management because it directly impacts the results of the consultancy, where its quality costs are directly affected in any time change, considering the loss of time a cost of internal failures when losing a client or costs of prevention failures when redoing activities.

The challenge of consulting is to understand the needs of its clients, propose a financially viable action plan, feasible in the timeline, that meets the competitiveness of the sector through an effective mechanism, to deal with planned and unexpected events, optimizing industries with technology harmonization, communication creating intelligent factories (Santos et al, 2020a)

This work highlights the time variable that is determinant for the efficiency and effectiveness of a consultancy, according to Awan, Ahmed and Zulqarnain (2015), the leadership and command skills that here is considered that of the consultants involved in the project, have a positive effect on the time and cost of the project of elaboration of the same, so, consultants should exercise the skills of time management, planning, and communication.

Among the skills the competence of time management should be considered critical, it is known that there is no magic formula for time management, but one can build guidelines to effectively produce significantly positive results, to demonstrate the complexities of time in the management of a consultancy, mapping the results and applying them in company routines through indicators. (Awan et al, 2015).

The objective of this case study aims to describe the implementation of improvements

in the back-office area, thus enabling increased performance in the execution of demands and deliveries to internal and external customers of a small consulting company.

2. Theoretical framework

Nessa section we present themes that facilitate the understanding and importance of reader research, in Time Management, PMI Time Management Concepts, and 5W2H's Tool

2.1. Time management

According to Andrade and Tiago (2006), "Managing Time" is a force of expression, because it will always be the same, and one hour will always have 60 minutes and one minute 60 seconds, with the difference in management and how you take advantage of this time.

Thus, according to Covey (1989, p. 90), "the essence of the best ideas in the area of time management can be captured in a single sentence: organize and execute according to priority", which represents the evolution of three generations of the theory of time management, which is: (i) the first generation is characterized by tickets and lists, to confer a certain appearance of organization and relevance to the many demands made on our time and energy; (ii) the second generation can be characterized by calendars and agendas. This wave reflects an attempt to look ahead, to mark events and activities in the future; (iii) the third generation reflects the current time management field. Thus, Covey (1989) defines the administration of time as a method that relies on what each human generation creates to manage activities in a determining period, thus each generation adapts to greater control of time, making evolutionary habits.

The authors Ostrenga, Ozan, Mcilhatan, and Harwood (1993), define that the analysis of business processes or BPA - Business Process Analysis is an essential technique for understanding, analyzing, and improving organizational processes, being focused on the design of the workflow. The method helps to study, identify and mitigate problems in processes, helping to improve quality, execution time, management, and costs, thus, a way to identify opportunities for improvements and corrections and can be aided from other techniques for constant evolution.

According to Favaretto (2001), Demand Management is the point of integration between the company and the client, considered responsible for the proper planning of the

demands generated, externally or internally, to meet a balance between what the market requires and what products can provide.

2.2 PMI time management concepts

In a highly competitive and accelerated global market, managing the time of a project is the great differential of companies, this management elaborated in a very contextual way makes the projects adapted to the constant changes of the environment. According to the Guide Project Management Institute - PMI (2017), a well-detailed plan time a management or schedule management shows the steps required to get the project to leave promptly, these processes are presented with defined interfaces, although in practice they can overlap according to the size of each project.

According to PMI (2017), these processes are:

- Plan schedule management - establishes policies, procedures, and documentation to be adopted throughout the project;
- define the activities - identifies and documents all the steps and actions to be carried out during the project;
- swarm the activities - identifies and documents the dependencies of these activities;
- to take the duration of the activities - estimates the period of work required for each activity according to its resources;
- develop the schedule - analyze and sequence the activities, create a project schedule model to follow during the execution;
- control the schedule - monitor and update *status* and manage changes in the basis of the schedule.

2.3. Tool 5W2H's

A tool used mainly for planning, the 5W2H was created in Japan for the automotive industry to assist in the use of the PDCA cycle (Plan, Do, Check, and Action). It is a methodology that presents an action plan for pre-established processes that need to be designed in a clearer way possible and can function as a mapping of these activities, by

having as the main objective, answer seven questions, and develop in an organized way without skipping steps. (Polacinski et al 2012 as quoted in Grosbelli, 2014).

Silveira (2016), as mentioned in Azevedo, Costa e Silva (2018), citing this checklist can be presented below in Table 1, evidencing the 5W2H's.

Table 1 - Action Plan.

Steps	Content of responses	Example of questions
What, what to do	Actions necessary for the theme analyzed	<ul style="list-style-type: none"> • What should be or is being done? • What are the inputs of the problem/process? • What do you want to extract from the problem/process? • What methods, materials, and technologies should be used?
Why, Why, New	Justifications of actions	<ul style="list-style-type: none"> ○ Why does this problem occur? ○ Why runs this way? ○ Why act on this problem?
Where	Places influenced by actions	<ul style="list-style-type: none"> • Where does the problem occur/ occur? • Where do I need to act to fix the problem? ○ Who are the agents involved?
Who, Ding	Responsibilities for actions	<ul style="list-style-type: none"> ○ Who knows the process better? ○ Which people should implement the action plan?
When I'm	Set deadlines	<ul style="list-style-type: none"> • When to start and finish? • When should each step of the plan be executed? ○ How will the plan be executed?
How to	Methods to be used	<ul style="list-style-type: none"> ○ How to register the necessary information? ○ How do I define process steps?
How Much	Set budget	<ul style="list-style-type: none"> • How much will be the cost involved? • How much will the necessary resources

cost?

- How much does it cost to fix the problem?

Source: Brum (2013) *apud* Azevedo, Costa e Silva (2018).

2. Methodology

According to Traldi (2009), the research carried out in this work is descriptive to identify the critical factors of time management in consultancies, their nature and qualitative, represented in a case study where real facts are presented portraying the dynamism of the organization's routines and solving concrete problems in management. The stages of development of the research method were:

1. Describe the company and its mapping of the consulting company's processes;
2. Identify the reasons for deficiencies in consulting projects and define which one to attack;
3. secondary data research: books and articles on time management and 5W2H's topics, to clarify and direct the research;
4. develop a mind map to facilitate the understanding of interactions between activities and identify the critical factors of time management defined in the mind map;
5. apply 5W2H's to critical success factors;
6. analyze the constructs of 5W2H's and propose actions;
7. follow the results of these actions and build the lessons learned from the work.

These steps allow the reproduction of research in different scenarios, in future works with similar themes.

3. Development of the Case Study

To demonstrate the complexity and relevance of topics such as Time Management, Task Management, and Development within organizations, the study of the implementation of the Action Plan for improvements in these topics was developed, a study developed by the research group and authors of this work, providing both organizational and academic learning to the participants of the research group, company, and society. Thus, performing in a participatory way the monitoring of the idealization, diagnosis, and implementation of

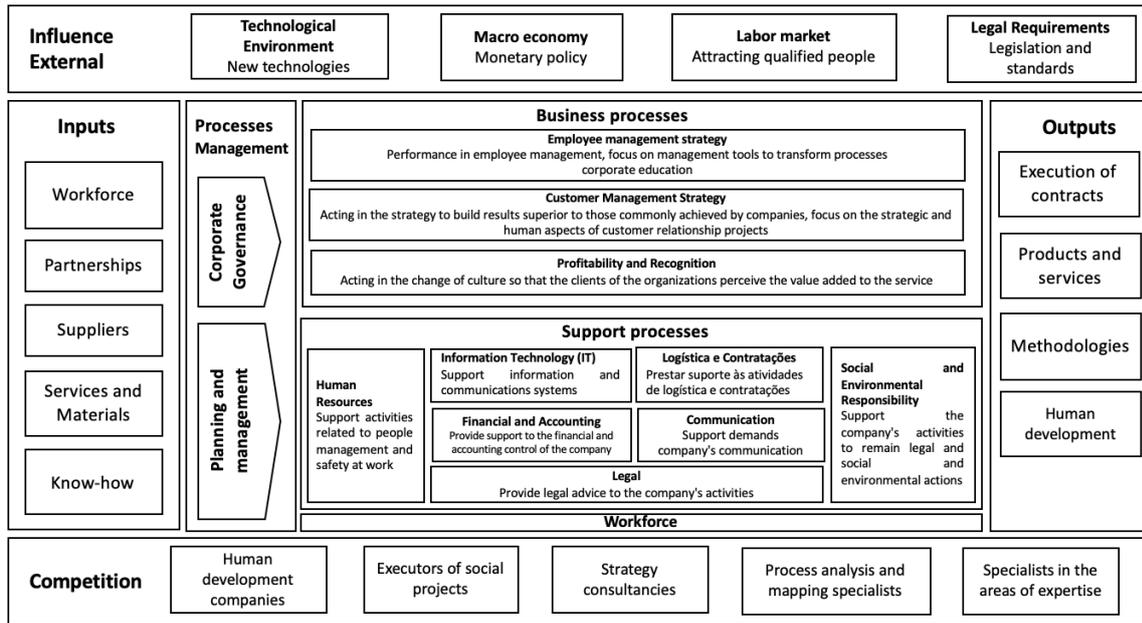
corrective actions in the Back-Office area of a consultancy, which had gaps in the execution and control of deadlines of demands to internal and external customers of the organization, with the help of methodologies that seek to identify and mitigate diagnosed gaps, promoting the increase of institutional performance.

The study had as its starting point the diagnosis of gaps through the mapping of processes and identification of bottlenecks in a mind map, which impacted on the quality, time and development of the activities requested by the area, supported by the concepts of Time Management, which with performance indicators were measured throughout the monitoring two months after the implementation of the Action Plan, to measure and evaluate the effectiveness of the actions. Together with the coordinators of the area and key people, the Action Plan was elaborated, with measures that act directly in each gap identified in the diagnosis and measurement with the support of performance indicators. At the end of the proposed period, the results were compared between Pre and Post implementation of the plan in the Back-Office area, to calculate the gains acquired with the work developed.

3.1 Company description

The company "A" (fictitious name), was founded in 2007 and is located in São Paulo - SP, is a consulting company specialized in utilities (Energy and Sanitation), Education, Health, Government Services, Public Sector, Retail, and Consumption. They propose to mitigate social problems using business methods, and producing benefits, being they, shared with all stakeholders of the processes within the contracts in execution. It has 48 direct and indirect employees, with a focus on operations throughout Brazil and internationally with contracts in Latin America. In Figure 1, you can see the main management processes, in addition to visualizing external influence factors, competitions, input, and output elements that are directly linked to the execution of contracts.

Figure 1 - Business Map of Company A.



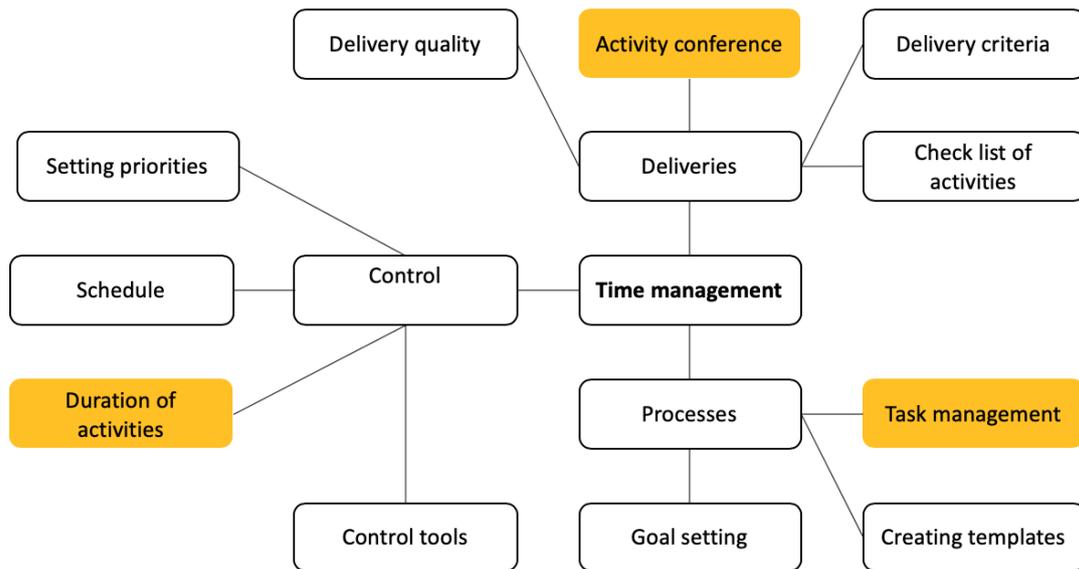
Source: Company "A", 2019.

3.2 Reasons for project inefficiencies

The company has a back-office group that works on the projects, being responsible for consolidating results, reports, monitoring schedules, and budgets, with consultants who coordinate all operations and develop methodologies and proposals to customers. Because the company has an organizational policy focused on the client, proposing to serve them promptly during the execution of contracts, it is common that additional requests arrive during the work routine, creating deficits in time management and final conference in the execution of activities, thus directly affecting the production of Back-office teams, being able to generate gaps in production and deliveries to customers, interfering in the results of the organization.

In Figure 2, a Time Management Mind Map is presented, for the organization of ideas, and ease of memorization (Amorim, 2018).

Figure 2 - Time Management Mind Map.



Source: The Authors (2019).

In Mind Map (Figure2), the boxes identified by the management of the consultancy in yellow are the diagnosed *gaps* that need to be worked within the area, the lack of moderation in the themes highlighted are those that generate the negative impacts within the chain of processes seen in Figure 1, which are related to productivity and delivery to customers.

After identifying the *gaps* within the Mind Map, performance indicators aligned with the identified bottlenecks were implemented, which indicated the actual size of the impact within the Back-office area, which was measured over two months. Together with the indicators presented in Table 2, goals were suggested by the coordinators, based on a scenario they would like to achieve. Being the indicator Rate of Tasks Performed considered as the measurement of activities done on the same day as requested. The suggested indicators and their goals are described in Table 2.

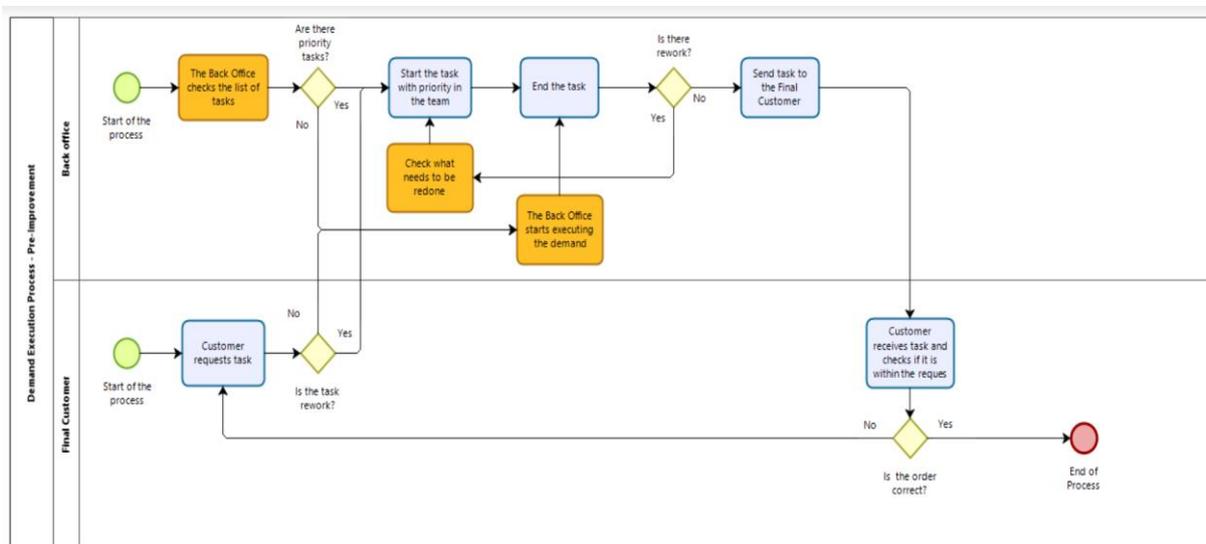
Table 2 - Indicators implemented for Time Management.

Task Rate Performed	Rework Rate	Activities Delivered Out of The Expected Deadline
Calculation: Total number of tasks performed / Number of tasks pending	Calculation: Number of reworks / Number of completed tasks	Calculation: Number of undelivered tasks on time / Total amount of tasks delivered
Target: $\geq 80\%$	Target: $\leq 10\%$	Target: $\leq 05\%$

Source: The Authors (2019).

For the Coordination to have a view of the whole process and its bottlenecks, the processes of execution of activities in the Back-office area were mapped, as can be seen, in Figure 3, thus it was signaled in the process mapped where there were identified gaps and aligning to the Mind Map created initially, facilitating the intervention proposals and their impacts and the intentions of future gains.

Figure 3 - Demand Execution Process - Pre-Improvements.



Source: The Authors (2019).

3.3 Application of time management in projects

Soon after the consolidation of the diagnosis through the Time Management Mind Map, the implementation of the time management concepts based on PMI began, which were

gradually formed according to the relevance of each of the identified gaps. Through the 5W2H methodology, an Action Plan was designed to remedy the deficiencies of the area and its impacts on the team's productivity.

It is emphasized the functionality of the tool as a guiding mechanism for the application of the concepts of Gare of the Time of the Project Management Body of Knowledge - PMBOK in the area of Back Office, the Action Plan was shared with the entire team to raise awareness of the objectives that everyone should achieve. In Table 3, is the 5W2H's tool filled, with the points diagnosed in *Mind Map* as the guiding principle of the tool, focusing on their mitigation?

Table 3 - 5W2H's of gaps in the Time Management Mind Map.

<i>What</i> (what?)	<i>Why</i> (why?)	<i>Where</i> (where?)	<i>When</i> (when?)	<i>Who</i> (who?)	<i>How</i> (how?)	<i>How much</i> (how much?)
Create the conference process of the activities performed	So that activity is not delivered to the end customer with errors	In the <i>back-office</i> area	Immediately	Anyone on the back-office team other than the one who finished the activity	With a <i>checklist</i> of points of attention at the conference in all finished activities, in physical or digital format	No costs
Define the duration of fixed activities in the team routine	To be aware of the average time that the team performs the fixed activities in the work routine	In the <i>back-office</i> area	For a one-week time the duration of the activities	All performers of the activities	Calculate the average time with the results obtained in the follow-up	No costs
Develop a task management method	Know the process and control the activities that are requested (fixed and sporadic) and that are delivered to internal and external customers	In the <i>back-office</i> area	Immediately	Team leader (coordinator or supervisor)	Create activity management worksheet run, run, and complete and map the activity execution process to propose improvements	No costs

Source: The Authors (2019).

3.4 Gains in project performance improvement

After defining what improvements should be made and what objectives they intended to achieve with the initiatives, the team was made aware of the results they were obtaining

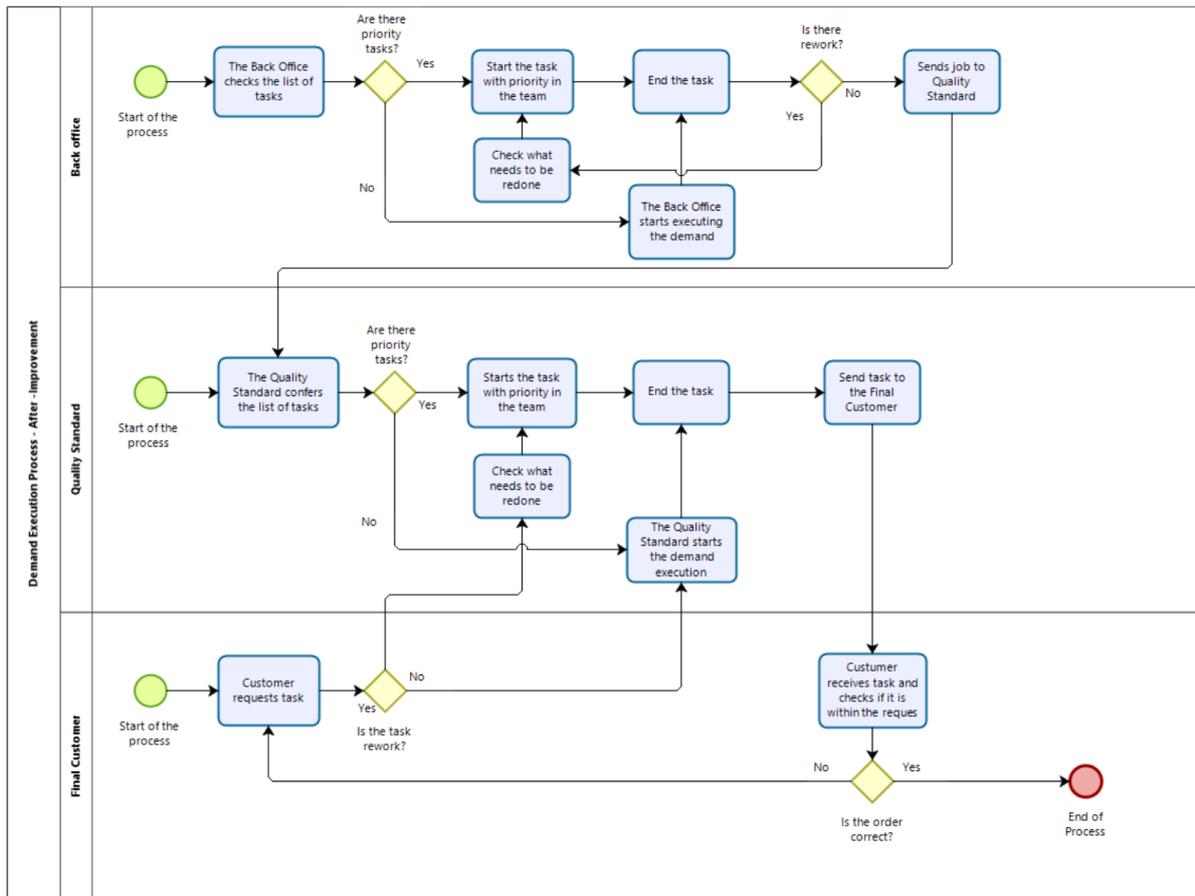
and what actions would be used to mitigate the gaps, in addition to the goals they were willing to achieve, thus directly including the team in the implementation of the action plan.

With this, the back-office team has identified the need to create a new area, which would take care of the conference and possible rework from the Back-office *area*. Thus, employees were selected to compose the Quality area, which would support the Back-office in executing the demands, to check all the activities performed to avoid rework that ends customers requested for errors or inconsistency with what was requested, thus taking away the overhead of the Back-office team, which was responsible for performing and checking the activities, in addition to performing rework.

The redesign of the workflow, with the inclusion of the new area stipulating the deadlines for execution, conference, and delivery of demand, aligning the new process with the indicators created for the control of Time Management and Execution of Activities, which were placed in the management panel insight, so that the team and coordinators would monitor the performance. It is also created a demand control worksheet that is available on the *intranet*, for access of all teams, which will update the *status* of the demands. The new flow of the Demand Execution process is represented in Figure 4, which shows the interaction between the back office, quality, and end-customer processes

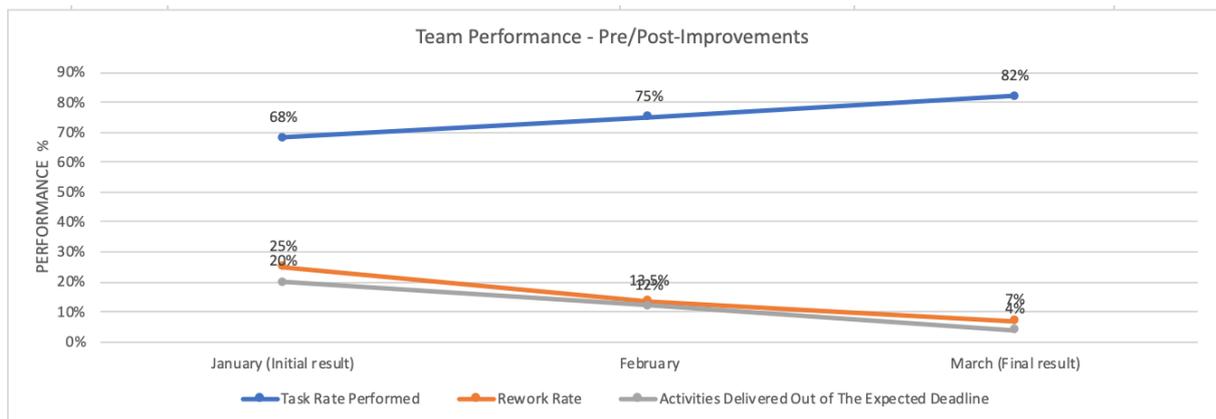
To compare the initial results with the results that were obtained at the end of the follow-up, the results of the week before the team meeting were used to measure the current status of the Back-office team in the indicators created by the coordinators. During the following two months, weekly meetings were held with the Back-office and Quality teams to present the current performance indexes of the teams, mainly in the duration of the execution of the activities, which in Graph 1, is represented the evolution of the results in the months of implementation of the action plan, being the month of March being the final result of monitoring the implementation of the Action Plan.

Figure 4 - Demand Execution Process - Post-Improvements.



Source: The Authors (2019).

Graph 1 - Performance results of the *Back Office* Team Pre/Post-Improvements.



Source: The Authors (2019).

The graph demonstrates the achievement of the goals proposed in the Action Plan by the Back-office team, thus achieving greater performance in each indicator that was proposed by the coordinators in the structuring of the Action Plan. The performance of the team within

the plan increased the performance, surpassing the proposed goals, thus having a positive evolution resulting from the improvements, which can be seen in Table 4, which compares the Final Result (last month of follow-up of the Action Plan), with the established goal, and in the Evolution column, the percentages of the difference between the performance of January (Pre-implementation) and March (Post-Implementation).

Table 4 - Indicators and the percentage evolution of the Back-office team.

	January (Initial result)	February	March (Final result)	Goal	Evolution
Task Rate Performed	68%	75%	82%	Target: \geq 80%	82% - 68% = 14%
Rework Rate	25%	13,5%	07%	Target: \leq 10%	25% - 07% = 18%
Activities Delivered Out of The Expected Deadline	20%	12%	04%	Target: \leq 05%	20% - 04% = 16%

Source: The Authors (2019).

Thus, they obtained a 14% increase in tasks performed within the area and an 18% decrease in the rework rate, demonstrating that the purpose of increasing the performance of the team's deliveries was achieved, and the main objective of implementing the concepts derived from Time Management in the PMBOK to increase the number of tasks performed on time and not to overload the team was achieved, reducing the rate of out-of-date deliveries by 16%.

4. Conclusions and Considerations

The implementation of the Action Plan directly led to changes in the structuring and measurement of performance results of the organization's teams, remedying the gaps of the Back-office area, such as Time Management and Demand Management, considered complex topics to be measured and addressed, thus being remedied lower levels, making the company more competitive in the market, due to increased performance in delivering demands to customers and internal management of activities, meeting internal and external needs. Having achieved a reduction of more than 14% in the results of the indicators, emphasizing the reduction of 16% of the rate of deliveries out of time, due to the redesign of processes focused

on Time Management and increased quality of delivery, work carried out in the two months of monitoring the implemented actions.

Thus, standing out as an example of implementing an improvement plan in management to increase operational and strategic performance, which will follow in the organization after the follow-up period of the Action Plan. Being an example of achieving results relevant to consulting companies or in areas that deal with deliveries directly to customers, which require autonomy and quality in the activities performed, contributing to the development of people, processes and organizations focused on Production Engineering, besides contributing to the development of multiple professional and academic competencies to the students who make up the research group and the university in which the development of the case study was made.

The proposal to continue this research and apply it in other business models, however, it is necessary to consider the varieties of existing consulting companies, so if it is not adapted to the various sectors and sizes, has the risk of not being effective because it refers to an innovative theme for some segments.

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