STAKEHOLDERS AND THE IMPACT THAT EXERCISE ON DIGITAL TRANSFORMATION PROJECTS

Partes interessadas e o impacto desse exercício em projetos de transformação digital

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ABSTRACT

The purpose of this technical report was to observe the relationship of internal and external stakeholders during the execution of a digital transformation project in a leading vehicle rental company in Brazil. The report was prepared using the qualitative research approach, using consultation of the project’s primary data, document analysis and participant observation. The results signal the importance of the correct mapping of stakeholders and how it affects the bonds of trust between the various parties involved, a factor capable of influencing the trajectory of the project. This study was limited to having analyzed only one project. As future studies, the impact of stakeholder influence on digital transformation programs and portfolios and how the time factor is affected in this organizational arrangement could be studied.

Keywords: Stakeholder management; Digital Transformation; Customer service.

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Stakeholders and the impact that exercise on digital transformation projects

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RESUMO
O objetivo deste relatório técnico foi observar a relação dos públicos interno e externo durante a execução de um projeto de transformação digital em uma locadora de veículos líder no Brasil. O relatório foi elaborado com abordagem qualitativa de pesquisa, utilizando consulta aos dados primários do projeto, análise documental e observação participante. Os resultados sinalizam a importância do correto mapeamento dos stakeholders e como isso afeta os laços de confiança entre as diversas partes envolvidas, fator capaz de influenciar a trajetória do projeto. Este estudo limitou-se a ter analisado apenas um projeto. Como estudos futuros, pode-se estudar o impacto da influência das partes interessadas nos programas e carteiras de transformação digital e como o fator tempo é afetado neste arranjo organizacional.

Palavras-chave: Gestão de stakeholders; Transformação Digital; Atendimento ao Cliente.
INTRODUCTION

The Stakeholders are composed of customers, organizations, sponsors, executors and the public inherent to the project. Regarding the relationship with the projects, Stakeholders are important opinion makers and are considered, in many cases, those responsible for providing and mediating an adequate environment for the project's objectives to be achieved (Drouin et al., 2017; Eskerod, 2019). Stakeholders can be divided into internal and external, where external ones are characterized by customers, government sectors or suppliers. Internal stakeholders are considered the organization's human resources, which add value to projects through their skills and competences (Kutomi & Piscopo, 2013; Obradovic et al., 2016).

In terms of business competitiveness and sustainability, Customer Service (SAC) can be considered a department within organizations with different dimensions to be explored (Peppers et al., 1999). To understand the relationship between the services provided by SAC, mainly in companies, a survey conducted by the Aspect Consumer Experience Survey in 2018, pointed out that 69% of customers see SAC services as the true test of how these organizations are valuing their relationship with their employees. customers (Aspect, 2018)\(^1\). Another survey, carried out in 2013 by Accenture, points out that 75% of customers are “extremely frustrated” when it is necessary to return the calls already dialed to a certain company to solve their problem through human service (Accenture, 2019)\(^2\).

Consumer adherence to new services through the use of the internet, ease of access to information, the use of increasingly innovative technologies and the increasingly fierce competition from companies in search of new customers, become barriers to be disrupted by customer service companies (Julio Moretti, 2019). In this context, the adoption of technology and automated processes in the services provided by the SAC of a company, can contribute to the increase of operational performance. Automated services with access to the internet become key parts to boost SAC services. According to Julio Moretti (2019), 91% of companies that maintain the highest levels of consumer satisfaction in brand recognition, use in their SACs, solutions based on Artificial Intelligence, such as chatbots, to increase the satisfaction of their consumers . According to the author, the customer satisfaction rate of companies that do not use such technologies is only 42% satisfaction.

Thus, where on the one hand are the stakeholders, considered opinion makers and capable of influencing the results of the projects, and on the other hand, companies in the SAC segment with the need to transform their manual processes into digital ones, this technical report intends answer the following question: what is the influence of stakeholders on digital transformation projects in customer service companies? The starting point for the elaboration of this technical report was the collection of information from a digital transformation project in a vehicle rental company and leader in vehicle outsourcing in Brazil. The project had the participation of internal and external stakeholders, in addition to the digital transformation software development team for customer service. The company performed an average of 800,000 telephone calls / year from customers, which were performed by human agents from the SAC department. As a result, the company suffered negative impacts such as high operating costs, low customer satisfaction in relation to service, a high number of unsuccessful phone calls and the limitation of human service during business hours.

The purpose of this report was to observe the relationship of internal and external stakeholders during the project execution process, highlighting the relationship and impacts on the project's results. This technical report is organized into five sections, including this introduction. Next, a brief review of the literature on stakeholders, automated systems and Artificial Intelligence will be presented. Subsequently, methodological aspects will be addressed. In the sequence, the results and the final considerations are presented.

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\(^1\) https://www.aspect.com/globalassets/files/ebooks/2018_Aspect_Consumer_Experience_Index_Results.pdf

1. THEORETICAL REFERENCE

In this section, the concepts about stakeholders and the relationship with the results of the projects and about possible software solutions based on Artificial Intelligence are presented in summary form.

1.1 Stakeholders and the relationship with the results of the projects

Stakeholders are defined as relevant parts of a project, characterized by people or groups interested in the results and that eventually, through their influence, can affect the results of the project (Oliveira & Rabechini, 2019; Eskerod, 2019). The basic idea of stakeholder theory is that an organization has relationships with many constituent groups and that it can engender and maintain the support of these groups, considering and balancing its relevant interests (Freeman, 2010; Jones & Wicks, 1999).

In terms of their identification, Kutomi and Piscopo (2013) classify stakeholders as internal or external. The project manager is the best-known actor in the group of internal stakeholders. In addition to the manager, the sponsor, the technical team, the functional and the support manager are also part of this group. External stakeholders, on the other hand, depend on the scope of the project but, as an example, suppliers and government sectors can be included in this group (Rabechini Junior & Carvalho, 2003), and can be appointed as primary, secondary and tertiary stakeholders.

Oliveira and Rabechini (2019) define that the primary stakeholders are formed by the organization itself, responsible for the execution of the project, by the sponsors and the main suppliers. Secondary stakeholders, in the view of the authors, are formed by customers and actors, who have less impact on the project, such as suppliers and support areas, while tertiary stakeholders are composed of NGOs, media, competitors, among others.

Therefore, the understanding is that stakeholders, both internal and external, can significantly influence both the processes and the results of various organizational processes. According to Oliveira and Rabechini (2019), expectations and interests are factors that can influence the projects. For Eskerod and Larsen (2018), the influence can occur using financial resources, knowledge, approvals involved in the project’s life cycle and compliance.

Different stakeholders have different powers and interests within the projects (Kutomi & Piscopo, 2013), so it is important to map the stakeholders and relate the variables: levels of interest and power, in order to identify the most appropriate PMI strategy (2017). According to Kutomi and Piscopo (2013), stakeholders with low interest in the project and low power over the project or organization, the recommended strategy is to monitor. Those with a high level of interest and low power need to be informed regularly. Stakeholders with a low level of interest and high power need to be satisfied. Finally, those with a high level of high interest and high power, need to be kept close to the project and carefully managed.

In this way, the different expectations of stakeholders during the execution of a project, need to be managed. Ensuring synergy between internal and external stakeholders in relation to their respective interests and tolerances, can become an essential factor for increasing the performance of projects (Oliveira & Rabechini, 2019).

1.2 Solutions based on Artificial Intelligence

Artificial Intelligence (AI), is a branch of computer science responsible for the study of techniques that result in artificial mechanisms related to human cognition (Weber, 1999). AI, using computational techniques, may be formulated by mathematical models with the objective of obtaining knowledge through experience, divided into sub-areas, such as neural networks, machine learning, genetic algorithms and natural language (Magaña Martínez & Fernandez-Rodriguez, 2015).

The subarea of natural language processing is focused on the interpretation and processing of texts (Julio Moretti, 2019). Among the most common use of this subarea are translation programs, and chatbots, categorized...
as computer programs made for interacting with people, using natural language through simulations of a human being (Junior & Carvalho, 2018). According to Junior and Carvalho (2018), the main function of a chatbot is to automate everyday functions with a focus on functions that have a high degree of repetitive human interaction (Junior & Carvalho, 2018), performing the function with the same precision and assertiveness and much more economically (Kongthon et al., 2009).

Chatbots allow customers to obtain self-service, avoiding possible queues, waiting for service agents or email responses. In this way, it is possible to obtain a reduction in operating costs, training time and increase the productivity of human agents (Kongthon et al., 2009).

2. TECHNICAL PRODUCTION METHOD

This technical report initially followed an article by Biancolino et al. (2012) for the elaboration of technical production reports. The procedures were selected to meet the objectives of this report, which are mainly aligned with the qualitative approach. Thus, the data collection process used consultation of primary project data, document analysis and participant observation. As Valladares (2007) describes, participant observation considers the researcher-researched interaction. Thus, the information collected depends on the researcher's behavior during the collection phase and on the relationships, he develops with the studied group.

Therefore, the data were obtained during the realization of the project, and for the observation process the main aspects related to the project were registered and that would allow to reach the research objective. It is worth remembering that the objective of the report was to observe the relationship of internal and external Stakeholders during the project management execution process, highlighting the impact on the project's results.

The survey was carried out between September 2019 and March 2020. Regarding the documents, electronic spreadsheets, documentation of the scope and schedule of the project were analyzed, in addition to internal documents in text and email editors. The choice of these documents and the analysis process continued to be guided by the research objective. Corroborating these procedures, Martins and Theóphilo (2009) affirm that the documentary research uses primary sources of the most varied types of documents, allowing to obtain information and evidence of materials that were not used for any analysis work, or that can be reexamined.

Still regarding the observation process, the researcher participated in all project alignment meetings, in the development of the proposed software, in the training, implementation and post-implementation monitoring of the project with the stakeholders. After all the data collected, the analysis process was carried out, where the information was analyzed looking for a pattern of behavior that demonstrated a meaning that could help achieve the research objective, that is, a direction of meaning that demonstrated redundancy in the information. (Da Silva, Russo, & de Oliveira, 2018).

3. PROJECT CONTEXT

The characterization of the organization and the analyzed project where this technical report was made will be presented below.

3.1 Organization characterization

The organization where this technical report was made is a leading vehicle outsourcing company in Brazil, with a fleet of 85 thousand vehicles available to corporate customers and 208 physical stores spread across the national territory. The company has a staff of 3,200 employees and a projected organizational structure, with revenues of 4.6 billion Brazilian Reais in 2019 (almost 1 Bi US$).
Describing the customer base, the company has approximately 3 million customers, including individuals and companies, in the vehicle rental service. This volume generates an average of 65 thousand customer support calls per month made by the Customer Service team.

3.2 Characterization of the analyzed project

The analyzed project had as a central element of scope, the creation of a digital service platform for customer service through chatbots. The objective of the project was to implement digital channels for customer service, to make service more efficient, reduce operating costs, allow the automation of processes, and provide self-service to users. The project lasted approximately 6 months and started on 09/20/2019 and ended on 03/01/2020. Its scope permeated between the areas of SAC, Vehicle Reservation Center (CR), Fleet Service Center (CAF), Used Vehicle Service Center (SN) and the software development team.

The project, as mentioned, was composed of internal and external stakeholders. The interns, on the part of the business area, were constituted by the project managers from the areas of SAC, CR, CAF, SN and for the area of Information Technology, participated the Senior Manager of Technology and Innovation, three specialists in development of software and also the support team for legacy systems. In relation to external stakeholders, the Account Manager of the company Apple Inc. located in Ireland, responsible for monitoring the implementation of the chatbot on the Apple Business Chat channel, and the Account Manager of the BSP (business solution provider), supplier of the construction platform, participated in the project. conversational flows and communication with external channels, located in Brazil, responsible for carrying out the communication interface between the team of specialists of the car rental company and the internal team of BSP and contributing to the best practices in the construction of chatbots.

The scope of the project aimed at the development of a chatbots platform for digital service to the company's customers. The chatbots platform for digital service, was formed by a module for integration of legacy systems and connection to the BSP chatbots platform, which provided connections to WhatsApp, Apple Business Chat, Facebook Messenger, and Web Chat channels.

The platform was developed with the objective of providing a digital self-service solution to customers, through automated processes and providing derivation for the human service of the company's customer service areas. The areas involved have historically suffered from low customer satisfaction in relation to the human service provided, which presented operational difficulties in training new attendants, in addition to the limitation of service during business hours. Such negative factors, in addition to the company's digital transformation strategy, were the motivators for carrying out the project.

4. TYPE OF INTERVENTION AND MECHANISMS ADOPTED

The business organization portrayed here had an opportunity for improvement in the customer service sector of the SAC, CR and CAF operations, due to the fact that the vast majority of calls are made through telephone calls and e-mail. This operating model had some shortcomings: (i) the limitation of extending the service hours without increasing the number of agents, (ii) the training of new agents and (iii) the difficulty in standardizing service in operations. Such deficiencies were often noticed by the company's customers, an object of study that demonstrated their dissatisfaction with the services provided through low quality of service assessments.

Within the strategic goals of the company, were the improvement of customer evaluation and digital transformation, with the objective of providing the company with greater competitiveness and reduction of operating costs. To implement the strategy, managers from the SAC, CR and CAF areas were elected as internal project stakeholders, in addition to creating a team focused on innovation for the technical implementation of the project. External stakeholders were composed of the company hired to provide a platform that had the ability to connect to the main digital communication channels used in the country, including WhatsApp, Facebook Messenger, Apple Bussines Chat (ABC) and Web Chat.
Still in the composition of external stakeholders, due to the size of the company and the relevance of the project numbers, Apple, the company responsible for the ABC channel, requested that an Account Manager participate in the project, to ensure that this channel's chatbot would be in compliance with company guidelines and that best practices were applied. In return, Apple's stakeholder would make its contribution to the project by providing its expertise in chatbot deployment projects, user experience and conversational interfaces.

4.1 Phase 1

The project lasted approximately 6 months and was carried out using the agile methodologies approach. In the initial phase of the project, internal stakeholders were introduced to the chatbot technology that would be used in the project and explained which processes would be implemented for the new digital service channels.

The stakeholder of the Apple company requested the details of the processes so that it could approve the creation of the brand within the ABC channel. The innovation team was responsible for receiving the details of the processes, compiling this information in template spreadsheets provided by Apple and submitting them for approval by those responsible for the project.

4.2 Phase 2

In the second phase, the development of the digital platform was initiated, in which it was realized that the process of consulting fines for late appointments, indicated by the SAC Manager as the most significant process in volume, did not have the same importance when analyzed through of the service metrics collected by the innovation team. This scenario triggered a series of mistrust in the development team regarding the quality of the information received from the internal stakeholder responsible for the SAC operation.

In contrast, the requirements received from the stakeholder in the CAF operation were solid and reliable. However, due to lack of confidence in the schedule in relation to the delivery time, the same stakeholder asked the innovation team to exclude systemic integrations from the project, thus resulting in 100% of the operation's customers being served by human agents. Parallel to this scenario, Apple's stakeholder maintained daily communication with the innovation team, with the purpose of better understanding the project's business processes and service quality indicators, previously defined in phase one.

In view of the actions of internal and external stakeholders, a mapping of the project's communication processes was carried out. For the new communication model, two variables were considered: (i) the level of interest and (ii) hierarchy relationship of the stakeholders in the project. The new mapping containing the communication strategies was presented and disseminated to all involved. The objective was to employ the new model in the process of validating the scope requirements for all those involved in the development of the digital platform.

The Coordinator and the operational auditors identified the areas and business processes to apply the extractions. They highlighted the corresponding systemic transactions, and as a requirement determined where the business rules were applied, to support the development of the verification scripts. In general, this step was clearly aimed at identifying the data sources of the business processes, the rules applied and defining which audit procedures should be developed to form the monitoring and tests that could be automated. This mapping was elaborated and consolidated in a matrix with a description of the controls, risks, and transactions of the system, considering recurrences of execution and parameterizations.

4.3 Phase 3

In the third phase, the chatbot already had a Minimum Viable Product (MVP). According to Junk (2000), an MVP corresponds to a product construction architecture with gradual and continuous evolution, allowing the dynamic balance between cost, schedule, resources and quality in software development projects. In this way, internal stakeholders were asked to list the attendants who would carry out the MVP homologation phase through
service on the new digital channels.

As part of the digital transformation strategy, a training schedule was prepared for users of the new digital platform and, subsequently, the execution of a pilot test in a controlled environment of the company. Internal stakeholders behaved in a controversial manner to what was previously planned. The CAF operation manager promptly sent the training schedule for the entire operation, while the SAC operation manager delayed delivery of the schedule, thus resulting in training delays.

At this stage, both the innovation team and Apple's stakeholder became better acquainted with the project's processes and requirements and, consequently, increased the level of confidence of the CAF Operation Manager. With the increase in confidence, it was possible to demonstrate that the implementation of digital automations was feasible within the current schedule, obtaining possible operational gains for all the company's operations. It is important to note that the gain of confidence occurred through metrics, which were identified by the knowledge in digital transformation projects of the senior manager of the innovation team, during the controlled tests and which were properly reported to stakeholders and defined in phase one of the project.

### 4.4 Phase 4

In the fourth phase, the stage of completion of the project, a greater engagement was noted between the external stakeholder, the innovation team and the CAF operation manager. This engagement among stakeholders, made possible small changes in scope, which aimed to adjust the processes that were requested by customers on digital channels, and that had not been foreseen in the project planning time and that were analyzed and, if possible, developed without impacting the deadline for delivery.

In this phase, there was an increase in the level of reliability between Apple's stakeholder and internal stakeholders. The result was the release of components in the chatbot recently launched by the company, in order to validate its usability in the project. Such technological components were implemented in the new digital platform as a tool to collect customer satisfaction (NPS), which was requested by the CAF manager.

At this stage, the indicators were notable for the areas participating in the project and this awoke in the SAC manager the importance of having a closer role in the project, because as a result of her absence, in many situations she was unaware of the processes that were already implemented and in tests controlled in the chatbot. At the end of this phase, the project was implemented, and its metrics were monitored weekly by stakeholders to ensure that the objectives would be achieved. Table 1 shows the summary of each phase of the project.

<table>
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<th>Table 1: Stakeholder actions and results at each stage</th>
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<td><strong>Phase</strong></td>
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Stakeholder management evolved during the execution of the project. As shown in Table 1, we can identify that during the execution of phase 2, the imprecision of the information evidenced the failure in the mapping, causing an impact in the following phases. We can notice that the intervention carried out at this stage, positively impacted the behavior of stakeholders and the way they started to impact the project. This analysis is more fully detailed in the next chapter.

5. RESULTS AND ANALYSIS

In the project design phase, there was a failure in the mapping of stakeholders. In the initial phases of the project, it was possible to notice that the internal stakeholders made decisions without basing metrics, to meet their interests, which could compromise the success of the project. This action reflects what was presented by Oliveira and Rabechini (2019).

In view of this situation, the senior manager of the innovation team, who in this project played the role of project manager, carried out a new mapping of the stakeholders, considering the variables of power and level of interest, according to the model proposed by PMI (2017). The new mapping was made available to internal stakeholders through a face-to-face meeting attended by the senior manager and the innovation team. External stakeholders were notified of the change by a video conference meeting. The contents of both meetings were recorded in minutes and sent to everyone by e-mail.

During the second phase, it can be noted that the distancing of the project by the SAC Manager (internal stakeholder), impacted the project in the execution of activities due to the change in priorities in software development. It can also be noted the impact on the project's management and operational results due to the choice of prioritized processes, in addition to reducing the levels of trust among stakeholders (Rabechini Junior & Carvalho, 2003).

The use of agile methodology induced the project's stakeholders to communicate more intensely. Due to the geographic distance from external stakeholders, meetings were held via virtual chat or e-mail exchange, while for internal stakeholders, face-to-face meetings were held at the company's headquarters. The way communication is established, according to Eskerod and Larsen (2018) and Oliveira and Rabechini (2019), can bring benefits to the project team, such as increased confidence, gaining empathy and greater involvement in the search for solutions of possible problems contributing to the objectives of the project are achieved.

In the third phase, the stakeholder mapping problem was solved, and more effective communication was observed within the project, the CAF and Apple stakeholders started to play a more active role in the project. The part of the scope that referred to the SAC team, which had been impacted by the distance from the stakeholder, as it did not have the necessary experience and skills for the project, was redesigned based on the metrics collected and the new results were reported weekly to the stakeholder who was satisfied with the results and not with the execution of the project itself.

The monitoring of process metrics was essential to identify the low involvement in the project of one of the stakeholders. According to (Oliveira & Rabechini, 2019), stakeholder involvement is one of the factors that contribute to the success of the project. The study by Rabechini Junior & Carvalho, (2003) states that it is important to consider the skills of the parties involved in the project. In this report it is possible to note positive and negative examples of the impact of stakeholder influences on the project results.

The ability to communicate clearly and objectively can be highlighted as a positive factor in the relationship between stakeholders, resulting in the monitoring of the execution of project activities. On the other hand, there was a negative impact of the lack of competence in the metrics analysis process, previously established in the project planning phase. This scenario contributed to the decrease in the level of trust between the project's stakeholders.

After the intervention of the senior manager, an improvement in communication between project members can be noted, generating greater engagement among stakeholders. From this, the contributions of stakeholders

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3 https://www.pmi.org/pmbok-guide-standards/foundational/pmbok
became more positive, not only for the project, providing that their interests within the project were achieved without friction with the other stakeholders, as described by Eskerod and Larsen (2018).

CONCLUSION

The results demonstrate the importance of correct stakeholder mapping and how it affects the trust relationship between them in the project and what it can affect the way they influence the project. In order to answer the question raised in this technical report about the influence of internal and external stakeholders in digital transformation projects, it was necessary to analyze the stages of the project and seek a basis in the existing specialized literature. In the project in question, several areas of the company were involved and, in this way, several stakeholders were mapped. Each of the stakeholders had capacities, interests and expectations in relation to the project, with that it was possible to observe and answer the question that guided the case study, the relationship of internal and external stakeholders in the project execution process and the impact on results.

In projects where there are several stakeholders, it is necessary to adopt different strategies (Kutomi & Piscopo, 2013). When relating power and interest level variables, it is possible to identify the best strategy to be chosen to deal with the stakeholder (PMI, 2008). Through the analysis of the history of stakeholders and control of their actions in the project, it was possible to review their respective roles (Oliveira & Rabechini, 2019), calibrate the variables of power and level of interest and create a management matrix, classifying each interested party in a more assertive manner; it was possible to adopt more effective relationship strategies.

The use of solid metrics to support suggestions for changes collaborated to create trusting relationships between stakeholders, which contributed to the existence of more spaces for analysis and small scope adjustments, which had not been considered in planning time. Thus, it may be observed that the mapping and classification of stakeholders in the project are fundamental to understand what impacts each one can have on the project. It was also evident that communication between stakeholders can increase the relationship of trust between them and provide flexibility in the influences they exert on digital transformation projects.

This study contributes to the practice so that other digital transformation projects can identify and carry out the correct mapping of the stakeholders, so that the influence they exert on the projects does not negatively impact the project and does not interfere with the level of trust of relationships within the project environment. The present study was limited to analyzing a project in a company with a specific follow-up; therefore, the results observed here might be different when adopted in portfolios scenarios or in companies from other sectors. As future studies, the impact of the influence of stakeholders on digital transformation programs or portfolios and how the time factor may impact the relationship between stakeholders and their influence on projects could be studied.

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