# Improvements in business processes aligned to the customer experience: case study in a book subscription club

*Mejoras en los procesos de negocio alineados a la experiencia del cliente: caso de estudio en un club de suscripción de libros*

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## ABSTRACT

Due to the rapid growth of the book subscription club market, analyzing the customer experience journey is becoming an increasingly important task, with the goal of retaining the customer for as long as possible in the club. Therefore, it is essential that the companies in this field have a properly functioning process chain to provide the customer with a great experience. The present study was conducted with the purpose of understanding the impact of business processes on customer experience in a book subscription club and to point out improvements. To this end, process mapping tools were applied to comprehend the current existing flows, and, subsequently, a relationship matrix was developed to connect the customer experience critical steps to the internal process chain. Through the tools employed, it was concluded that the most impactful processes are those that determine the early stages of the customer experience, such as defining the curator of the upcoming kit and defining the title, besides the task of assembling the member's kit. Additionally, as major enhancements were proposed the implementation of a validation system to the kit items through barcodes and the production of a document establishing which information can be published as a spoiler.

## RESUMEN

Debido al rápido crecimiento del mercado de clubes de suscripción de libros, analizar el recorrido de la experiencia del cliente se está convirtiendo en una tarea cada vez más importante, con el objetivo de retener al cliente el mayor tiempo posible en el club. Por lo tanto, es fundamental que las empresas de este ramo cuenten con una cadena de procesos que funcione correctamente para brindar al cliente una gran experiencia. El presente estudio se realizó con el propósito de comprender el impacto de los procesos comerciales en la experiencia del cliente en un club de suscripción de libros y señalar mejoras. Para ello, se aplicaron herramientas de mapeo de procesos para comprender los flujos existentes actualmente y, posteriormente, se desarrolló una matriz de relación para conectar los pasos críticos de la experiencia del cliente con la cadena de procesos interna. A través de las herramientas empleadas, se concluyó que los procesos de mayor impacto son aquellos que determinan las primeras etapas de la experiencia del cliente, como definir el curador del próximo kit y definir el título, además de la tarea de armar el kit del miembro. Adicionalmente, como mejoras importantes se propuso la implementación de un sistema de validación de los artículos del kit a través de códigos de barras y la elaboración de un documento que establezca qué información se puede publicar como spoiler.

## INTRODUCTION

The subscription club market has been growing steadily. In 2018, the Brazilian Subscription Clubs Association noted that this industry had 800 companies active in Brazil - with a 167% growth over the past 4 years in Brazil (ABComm, 2020). In a subscription club, an item is periodically sent to the customer's home, and for each shipment the consumer's expectation of the product increases accordingly to the quality of the service that was provided. Consumers tend to readily cancel services that do not attain a good experience given, for example, low overall product quality, dissatisfaction with the selection, or lack of perceived value (Li et al., 2023; Andonova et al., 2021). A failing club delivery, either through defective product, missing item, or delay, undermines the customer experience and may hasten a latent decision to discontinue the service. Furthermore, a customer's detrimental service experience not only compels the existing base to migrate to competitors, but also results in a heightened effort by the organization to attract new consumers, often unsuccessfully (Tseng et al., 1999). Consequently, maintaining a uniform level of service is extremely important, making it a challenge for clubs with recurrent subscriptions to ensure that the experience is always the best possible.

When it comes to customer experience, it is essentially considered the customer-company interaction points, also called moments of truth (Spiller, 2006). The assessment regarding the service quality by the customer will be the outcome of the combination of perceptions throughout the whole process of rendering the service (Rotondaro, 2002), in other words, these moments are ultimately responsible for the customer's appraisal concerning the service delivered, influencing their overall satisfaction with the company. Nonetheless, one rarely discusses the tasks that lay behind this service, which may have influence, even if indirectly, on the customer's experience, similarly to the moments of truth. The deliverance of the final product relies on a sequence of processes, with many stages and tasks distributed in different areas (Azevedo & Tinoco, 2020; Santos & Tinoco, 2021) - for instance, when it comes to a subscription club, since its production up to the logistic operation for its transportation. If any of the processes that are involved in this timeframe are not performed as they should be, the customer's final experience is already compromised.

Taking the book subscription club context, this experience begins at the point of selecting the book to be shipped and engages all areas of the company - ranging from the team responsible for assigning the book to the group responsible for billing the member. Oftentimes, customers choose to unsubscribe for reasons other than the choice of book, but rather a high frequency of emails, an incorrectly charged invoice, or an array of errors in assembling the products. Companies in this subscription segment must offer good experiences to

avoid high churn rates and accelerate growth and profitability (Li et al., 2023; Andonova et al., 2021).

Business processes, even if indirectly, impact customer experience. Kumar et al., (2008) via analyses conducted, highlighted Business Process Management as an important factor in achieving high levels of client satisfaction. So, the challenge is to ensure proper management of these processes to be in alignment with the customer experience intended to be provided. Process management enables the organization to analyze, define, execute, monitor, and manage processes more effectively. Effective business process management is a means to streamline processes, increase productivity, and strengthen communication (Azevedo & Tinoco, 2020). However, within the context of services provided by subscription clubs, to consider both the efficiency of business processes and their effectiveness from customer satisfaction and the experience generated by the products and services provided becomes important.

Controlling the process management alone but not measuring the level of customer satisfaction with the received experience, or vice versa, becomes somewhat incomplete. In this sense, the use of tools such as Business Process Management (BPM), which allows modeling the existing process and managing improvements in the organization (Smith & Finger, 2007), and the Service Blueprint (Shostack, 1984), used for mapping the customer experience and improving service processes, are necessary to integrate the two perspectives

and to have a greater alignment between the company's business processes and the customer experience. Not too many studies, however, address the two aspects and the influence of business processes on customer experience (Milton & Johnson, 2012; Gersch et al., 2011).

So, the main purpose of this study is to recommend improvements in the business processes of a book subscription club regarding the customer experience. To do so, failure points in the customer experience were identified and, as from these, the influence of the company's business processes on the customer experience was evaluated, and, lastly, proposals to enhance the business processes focused on the customer experience were presented.

The present study was carried out at a Brazilian book subscription club company, in which problems in inter-area communication are frequent. Not all teams are concerned with horizontal integration and realize the importance of a comprehensive perspective. Moreover, the lack of an end-to-end overview of the process results in some analyses being ad hoc, resulting in recurrent problems - which are often only noticed with customer complaints.

It is worth mentioning that this study was conducted with the aim of optimizing the service offered by a book subscription club to its members. The company is targeting a 20% increase in its membership base by the end of 2021, yet still fails in executing business processes, hindering this growth. Moreover, this is a moment to visualize all

**Revista Ingeniería Industrial**.
*Actualidad y Nuevas Tendencias*
**Universidad de Carabobo** - Venezuela

Año 16, Vol. VIII, N°30
ISSN: 1856-8327
e-ISSN: 2610-7813

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the processes that are performed, identifying opportunities for automation and even simplification, something that has never been fully examined in the company - which has been in the market for slightly more than 6 years.

The present article is divided into 5 sections. After the introduction, the theoretical framework is presented, bringing the issues related to the study. Subsequently, presents the methodological procedures, followed by the results and further discussion. At the end, the conclusions of the study are presented.

## THEORETICAL FRAMEWORK

This section provides a presentation of concepts considered to be crucial for the subsequent methodological stage. First of all, a background on the customer experience of subscription clubs is presented, along with the growth trend of the segment. Then, concepts of process analysis are presented both from the view of business and service processes.

### Contextualization of the experience in Subscription Clubs

As cited on Andonova et al. (2021) the convenience and comfort of receiving favorite products with no need to leave home is an increasingly recurring theme when it comes to consumer behavior. A signature club offers precisely this sought-after comfort and convenience, given that the payment is recurrent and the delivery is made directly to the customer's home - it is just required to maintain the address and payment method updated. In a study conducted by McKinsey consultants (2018), it was found that 15% of online consumers have signed up for at least one subscription to receive products on a recurring basis, usually through monthly boxes.

The online subscription service affords these consumers, who are generally young, middle- to upper-class urbanites, a more convenient, tailored, and cost-effective way to buy whatever they happen to want and need (Li et al., 2023; Andonova et al., 2021). In some instances, the service is slightly priced above the book market, but provides a comprehensive experience that is unavailable in ordinary bookstores or retail stores - the combined thoughtful curation, the sheer appeal of the materials produced, and the surprise of the content of the box is a major attraction of book subscription clubs (Noorda, 2019).

By offering a recurring product, the company also benefits. Aside from not having to convince the customer to buy the product every month, it is also an opportunity to build loyalty among those who already are in the base and to have them propagate the brand value themselves, either in their circles of friends or family, since loyal customers play the important role of brand advocates (Pereira & Bastos, 2009). When customer needs are satisfied, the quality of the relationship improves, increasing customer loyalty

**Revista Ingeniería Industrial**.
*Actualidad y Nuevas Tendencias*
**Universidad de Carabobo** - Venezuela

**Año 16, Vol. VIII, N°30**
**ISSN: 1856-8327**
**e-ISSN: 2610-7813**

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(Solvang, 2006). E-commerce subscribers tend to be young people who are usually in the age group from 25 to 44 years old and are mostly women, who account for 60% of the market (Li et al., 2023; Andonova et al., 2021). According to Santos et al. (2022) e Andonova et al. (2021), generation Y, as people in this age range are called, is made up of faithful consumers who heavily bond with their favorite brands and promote the product to their network of contacts.

According to Santos et al. (2022) by selling a recurring consumer product, generating value for the customers, and building a relationship with them, the chances of subscription renewal are quite high. On the other hand, this same generation is more demanding and requires companies to fulfill whatever was promise, having a higher ease of canceling the subscription if there is a failure in the service provided.

Subscription boxes, the purchase of a monthly set of often customizable or surprising items that are sent to the end user, erupted in the market, growing at an annual but steady rate of more than 100% over the past five years (Li et al., 2023; Andonova et al., 2021). According to Andonova et al. (2021), this growth was driven by the coronavirus pandemic, which impacted the world in late 2019. In 2020, the COVID-19 virus reached Brazil and, just as in the rest of the world, forced people to stay in their homes, reducing consumption in retail stores. Among the sectors that did not undergo the pandemic crisis so much was the subscription club sector, especially of books.

While not always considered an essential cost, being the top one to be reduced in many families when assessing essential and non-essential expenses, many people have found in books a haven in the midst of the chaos. According to a survey by Betalabs, between February and October 2020, the subscription club business model increased 12% in the total market and 55% in its base, being the book segment the most prominent, holding 27%.

Given this constant growth, it is essential to have a high customer retention rate. To this end, in addition to requiring engagement actions with the product, a good customer experience is paramount. According to Li et al. (2023) e Andonova et al. (2021), 28% of a group interviewed stated that the personalized experience is the most important factor to remain in a subscription club. The group also noted that churn rates are high and consumers promptly cancel services that do not offer superior end-to-end experiences.

To ensure the overall experience and address the customer's expectation, it is necessary to understand the customer's journey as a consumer (Silveira, 2020). It is also imperative to ensure the effective execution of business processes, so the customer expectancy is not compromised at the end of the chain. These topics are covered in greater depth in the following subsection.

**Business process analysis in companies**

In the transformation industry, process mapping is perceived from the flow, especially, of materials in one direction, in which raw materials are stocked and

transformed, creating a tangible and storable product. Moreover, companies are prone to view the optimal use without loss of resources during the process transformation to assume it is effective, while customers evaluate the process itself and the service results by their own perception (Van Looy et al., 1998). Process mapping is a means by which one can effectively focus the organization on its customers, ensuring quality and productivity in the key processes, obtaining more flexibility and objectivity in decisions, and transforming the organization so as to effectively make it more competitive. Also, Vernadat (1996) affirms that process modeling is of utmost importance for companies, as it enables the understanding of the working method, as well as the analysis and improvement of the information flow.

In this sense, the Service Blueprint, described by Shostack (1984), is a tool used for mapping the user experience in the usage of a service. This method allows the identification of activities that encompass the participation of the customer in the process, indicating where the interaction between customer and supplier occurs and where the customer exerts influence within the process (Gersch et al., 2011).

Considered a flexible tool when compared to other process mapping techniques, the Service Blueprint structure details all steps in multiple levels of analysis, supporting small interventions and/or changes in the structure if needed, and can be described by means of five components that assist the customer-company relationship (Correa &

Caon, 2000; Vanin & Tinoco, 2023). The tool, however, does not always depict the complete stream, since a certain amount of time may occur between the actions that an actor performs in the process, thus making the links between actions unnecessary to present (Milton & Johnson, 2012). Business Process Modeling (BPM) can be an alternative to a more detailed analysis of all the executed processes.

Business Process Modeling is the activity of depicting the processes of a company, so that the current process ("as is") can be analyzed and improved in the future ("to be"). Business Process Model Notation (BPMN) provides a graphical notation to represent a business process as a Business Process Diagram (BPD) (Chinosi & Trombetta, 2012), i.e., it portrays modeling in notation. It has a wide array of symbols to specify how each task is executed and what is the best sequence to describe the process (Milton & Johnson, 2012). The major importance in this methodology lies in the complete visualization of the flow that allows to perceive flaws and excesses in processes and promote their correction and improvement. In addition, it provides a complete view of the internal and external integrations of the business processes, enabling an improvement of both processes (Santos & Tinoco, 2021).

BPMN can be used to diagram a service process, but it does so from a fundamentally different perspective compared to the Service Blueprint. The customer-focused perspective of the Blueprint is very useful to understand the critical touchpoints that drive service

**Revista Ingeniería Industrial**.
*Actualidad y Nuevas Tendencias*
**Universidad de Carabobo** - Venezuela

**Año 16, Vol. VIII, N°30**
**ISSN: 1856-8327**
**e-ISSN: 2610-7813**

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satisfaction and has already been adapted to map the customer experience (Patrício et al., 2011). But underneath that are business processes from the organizational perspective that can be better represented by BPMN diagrams (Milton & Johnson, 2012). BPMN does not provide any concept related to customer experience (Kazemzadeh et al., 2015). In other words, the two tools complement each other by addressing different views. Incorporating Service Blueprint practices into methodologies for business process modeling, mapping, simulation, and automation would lead to a clearer integration of the customer's view of a service with the technology used to underpin the service (Milton & Johnson, 2012).

## METHODOLOGICAL PROCEDURES

### Scenario description

The present work has as study object a book subscription club founded by three business students from Porto Alegre. It started in 2014 with 65 members, and today it has more than 60,000 customers spread over 2300 cities throughout Brazil, all of whom receive a monthly literary kit at their homes. These members have a wide variety of profiles and ages, but they have in common the experience of being a subscriber. To provide this experience, the organization counts on more than 100 employees divided into seven areas. The organizational structure is linear, and therefore communication between areas is carried out through managers. The product, until reaching the end customer, undergoes several stages involving all of the company's areas. The focus of the work is restricted to two aspects: the first are the processes of the customer journey in the club, and all the interaction stages with the customer will be analyzed; the second are the business processes performed within the company, i.e., the sequence of tasks accomplished in the back office to deliver the final product.

### Research classification

This research, due to its objective of improving the company's processes, is classified as applied. Regarding the approach, it is mostly classified as qualitative, since, although it considers some already existing indicators, it uses mapping tools to relate the processes and understand their impacts on the customer experience (Harrington, 1993; Shostack, 1984). It has the character of exploratory research, by integrating the perspective of the customer experience to the perspective of business processes through a method that integrates several tools, and procedures classified as a case study, once the research and application of the method were performed by the authors together with the company's professionals, with a recommendation for improvements at the end of the study.

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*Actualidad y Nuevas Tendencias*
**Universidad de Carabobo** - Venezuela

**Año 16, Vol. VIII, N°30**
**ISSN: 1856-8327**
**e-ISSN: 2610-7813**

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## Working methodology

This research was conducted in five steps: (i) Assessment of process mapping tools; (ii) Mapping customer experience and failure points; (iii) Mapping the company's business processes; (iv) Evaluating the influence of business processes on customer experience; (v) Proposing business process improvements. These stages are detailed in the next paragraphs.

To begin with, a survey of the state of art was accomplished on tools for the analysis and improvement of business processes, and on the mapping of customer experience in services. This study was conducted through a bibliographical survey, in search of articles and studies already done on the subject. For the bibliographical research, the keywords chosen for the database searches were defined so as to find articles on the subject: "subscription boxes", "customer experience", "business process" and "service blueprint". Additionally, other combinations were made to guide the search, such as "subscription boxes and satisfaction".

The platforms used as a database were mainly Scopus and Google Academics and prioritized scientific articles in English published in the last 15 years. This round was important to understand the studies applied to the theme and capture details that should be examined when executing the methods. After that, the mapping of the customer experience was made using the Service Blueprint tool, once the tool represents a diagram to outline the service delivery and specifies the relationships between the activities of interaction with the customer that determine their experience, beginning with the consideration of the important moments of truth throughout their journey with the company (Patrício et al., 2011).

The observation of the customer journey for defining the moments of truth and mapping was conducted during the working period of one of the authors in the company through a squad focused on understanding the customer journey, as well as a data collection on documents prepared by the departments and with 3 employees of the company for validation of some points of interaction. This data compilation consisted of information regarding the front and backoffice activities and the support processes and was made through a virtual meeting, in which everyone was present at that very meeting. From this mapping, the failure points and critical stages of the process that affect the desired customer experience were identified.

This assessment of the failure points was performed through brainstorming, carried out remotely with one of the company's coordinators, and did not have a predetermined script - it was an open discussion about the mapping performed. The failure points with their respective critical steps, taken from the Service Blueprint, were prioritized using the GUT matrix (Dornelles, Júnior & Lerman, 2021). The matrix classification was built in collaboration with both the coordinator and a marketing analyst of the company, in which each one assembled their matrix

**Revista Ingeniería Industrial**.
*Actualidad y Nuevas Tendencias*
**Universidad de Carabobo** - Venezuela

**Año 16, Vol. VIII, N°30**
**ISSN: 1856-8327**
**e-ISSN: 2610-7813**

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according to their criteria of severity, urgency and trend, and later the divergent points were discussed, thus shaping the final matrix with their respective importances.
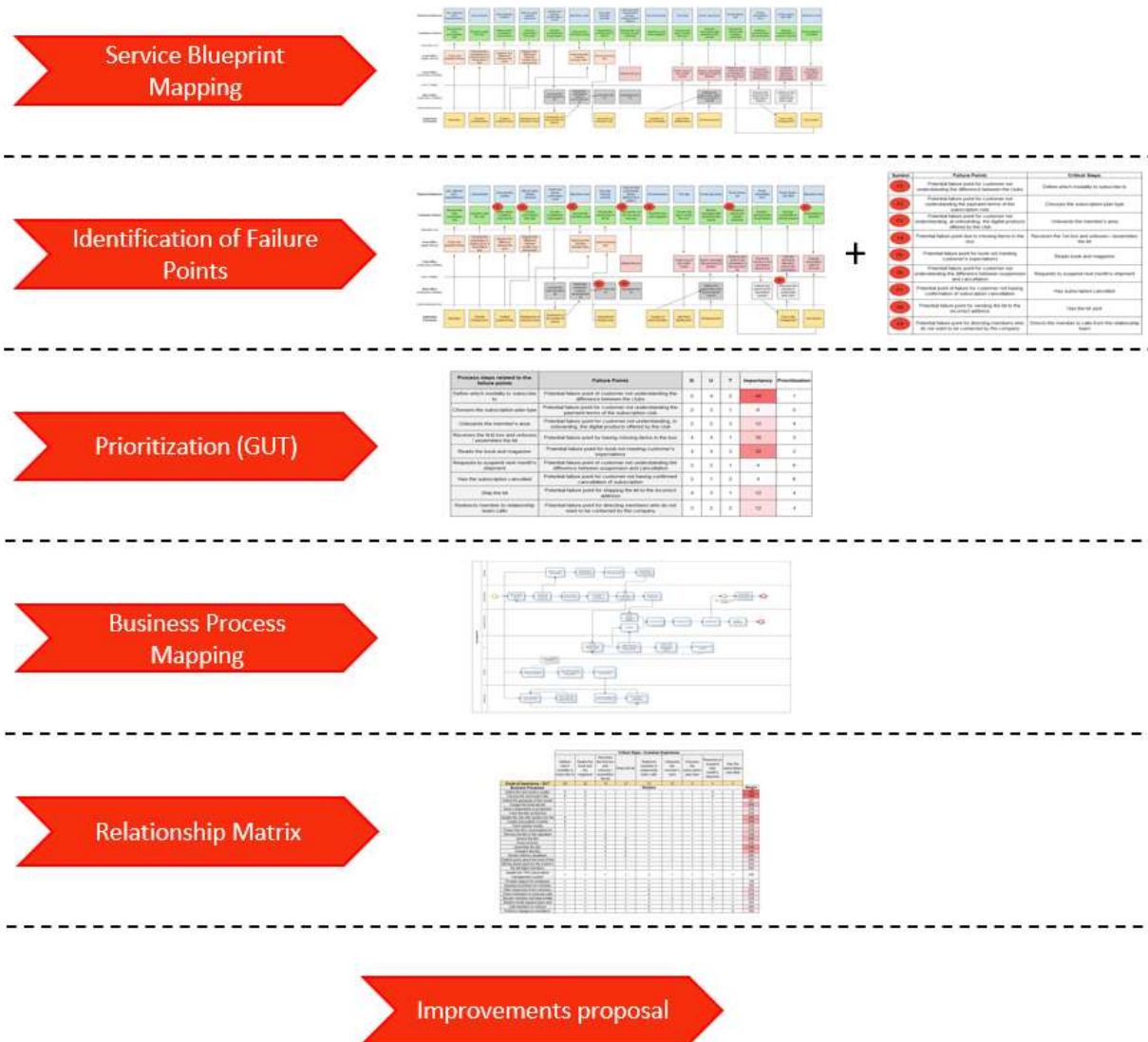
In the subsequent step, the mapping of the company's business processes was performed. The execution of this step is similar to the previous one: the company's macro processes for mapping were observed and the company's own documents with records of tasks and projects performed were also checked. Furthermore, new interviews were held with company employees, this time involving leaders from three different areas, as they possess a whole view of the process chain: the leaders from the operations, product/design, and marketing departments. The objective of the discussions with the leaders was to complement the mapping previously undertaken, and they were held remotely. This mapping was verified with the Retention team coordinator, who also has full knowledge of all the company's processes. BPMN was used as a tool.

The second-to-last step was to evaluate the influence of business processes on customer experience. With both mappings ready, a correlation between these two mappings was made using a relationship matrix adapted from the QFD matrix (Quality Function Deployment): the so-called QPD matrix - Quality Process Deployment (Gonzalez, Quesada, Picado &

Eckelman, 2004). The identified failure points in the Service Blueprint map and prioritized by the GUT matrix were related to the business process steps. The relationship of the QPD matrix was measured on a 3-point scale, where 1 is considered a weak relationship, 3 an intermediate relationship, and 9 a strong relationship. This matrix was developed as per the author's experience in collaboration with two company employees, via a virtual meeting. In this manner, it became possible to list the business processes that have the major influence on the shortcomings identified in the customer experience mapping.

Finally, the last step of the work method proposed improvements for the business processes. These recommendations are associated with the flaws previously found and were first validated by the head of the product team during an expository meeting, probably being endorsed by the 5 directors of the organization in case of a future implementation. The 5W1H tool (Meira, 2003) was used to detail the importance of every action to be performed, chosen from the prioritized actions in the previous phase. In Figure 1 below, it is possible to visualize, in thumbnails, the above-mentioned steps following the sequence in which they were conducted - apart from the stage of gathering the tools. In the results section, the thumbnails are in an adequate size for visualization.

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*Actualidad y Nuevas Tendencias*
**Universidad de Carabobo** - Venezuela

**Año 16, Vol. VIII, N°30**
**ISSN: 1856-8327**
**e-ISSN: 2610-7813**

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**Figure 1**. *Working Method*



## RESULTS AND DISCUSSION

This study made it possible to apply different tools to understand the context of the book subscription club and to develop a new way to correlate customer experience with business processes. The application steps of the methodology are presented below along with the respective results.

**Customer experience mapping**

The customer experience mapping stage began upon choosing to use the Service Blueprint tool. For this purpose, Microsoft Excel software provided the basis for drawing the map. Having defined the moments of truth, the customer actions were defined and, from this, the physical evidences were collected. Subsequently,

**Revista Ingeniería Industrial**.
*Actualidad y Nuevas Tendencias*
**Universidad de Carabobo** - Venezuela

**Año 16, Vol. VIII, N°30**
**ISSN: 1856-8327**
**e-ISSN: 2610-7813**

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the front-line actions were mapped, divided between the actions of the digital devices and employees, the back office actions, and finally the support processes -

crucial for a good service execution. In Figure 2, the mapping from the Service Blueprint can be visualized.

**Figure 2**. *Customer experience mapping*
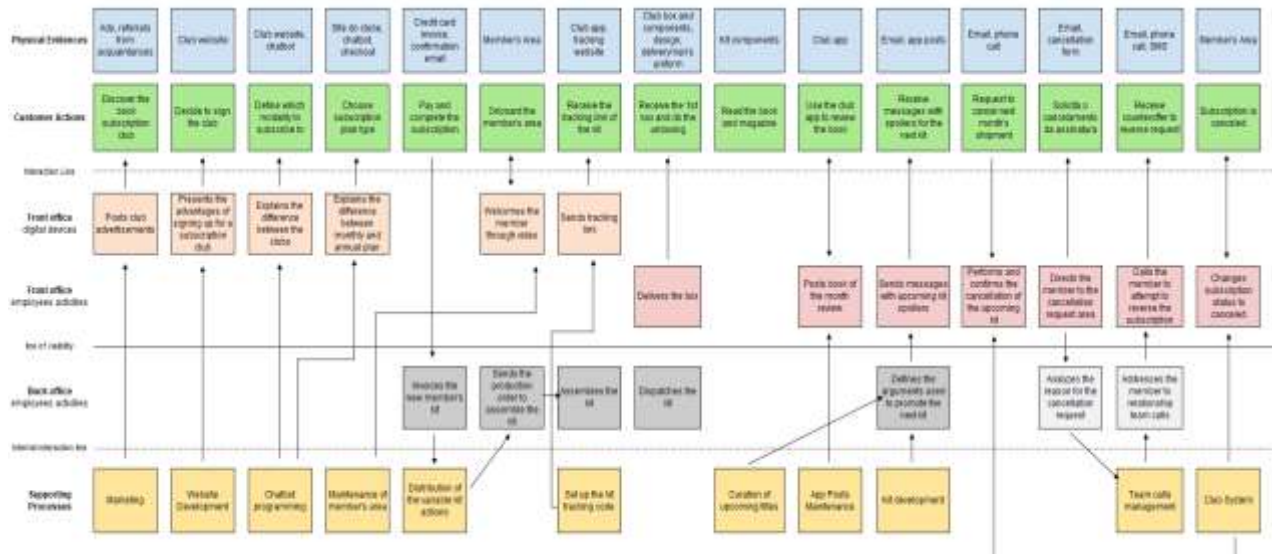


To obtain the mapping result, a validation was made with company employees. The mapping was presented to the 3 employees of the customer retention cell, and the reason for selecting these employees was due to the fact that they had already studied the customer journey internally and, therefore, had a good understanding of the entire customer experience. Furthermore, one of the employees is a production engineer and is knowledgeable in the tool used. Based on the feedbacks collected, the final version of the map was obtained, and the failure points were identified, as shown in Figure 3.

The failure points identification was made based on two factors: the authors' knowledge about the mapped aspects that have already caused some kind of problem among customers, and the perspective of

the retention cell coordinator - the same employee with a degree in Production Engineering. In Table 1, one can understand the failure points identified in the experience mapping and the related processes, categorized as critical steps.

It can be noted that the failure points are distributed, which means that they are not centered only in one part of the customer's experience. In addition, there is a common failure point between the customer's actions and the back office employees, point F4, demonstrating that the failure points are not always centered on the customer's actions. These points represent the critical stages of the process, and, for the purpose of understanding which of these stages were the most important, a ranking was made according to their seriousness, urgency and tendency for the

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*Actualidad y Nuevas Tendencias*
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**Año 16, Vol. VIII, N°30**
**ISSN: 1856-8327**
**e-ISSN: 2610-7813**

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subscription club - based on the GUT matrix.

**Figure 3**. *Identification of customer experience failure points*
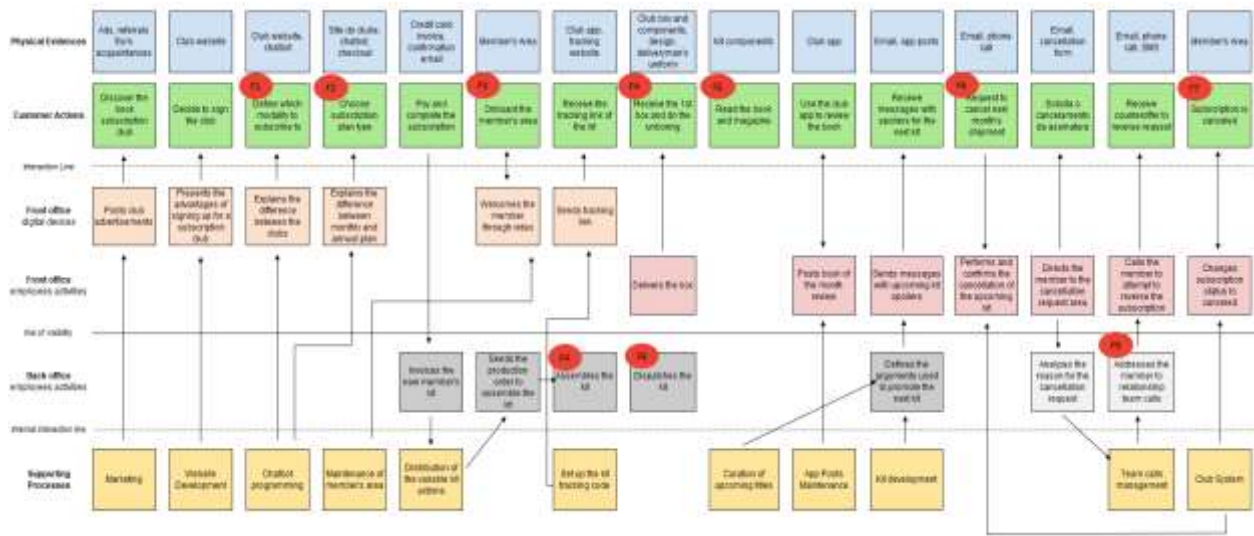


**Table 1**. *Failure points of the critical steps*

| Symbol | Failure Points | Critical Steps |
|---|---|---|
| F1 | Potential failure point for customer not understanding the difference between the clubs | Define which modality to subscribe to |
| F2 | Potential failure point for customer not understanding the payment terms of the subscription club | Chooses the subscription plan type |
| F3 | Potential failure point for customer not understanding, at onboarding, the digital products offered by the club | Onboards the member's area |
| F4 | Potential failure point due to missing items in the box | Receives the 1st box and unboxes / assembles the kit |
| F5 | Potential failure point for book not meeting customer's expectations | Reads book and magazine |
| F6 | Potential failure point for customer not understanding the difference between suspension and cancellation | Requests to suspend next month's shipment |
| F7 | Potential point of failure for customer not having confirmation of subscription cancellation | Has subscription cancelled |
| F8 | Potential failure point for sending the kit to the incorrect address | Has the kit sent |
| F9 | Potential failure point for directing members who do not want to be contacted by the company | Directs the member to calls from the relationship team |

This classification was validated with the coordinator of the retention cell and one of the company's marketing analysts, chosen for having already worked at the club for a few years and for understanding, in a macro way, the real situation of each process executed. The matrix is shown in Figure 4. The degree of importance is calculated from the result of the product among the severity, urgency and trend scores assigned to each of the stages of the process. Among the nine critical steps, two stood out in the prioritization conducted - the step of choosing the modality and the step of reading the book and the magazine. The phase of assembling and receiving the kit, dispatching the kit, calls to the members, and onboarding in the member's area came in the sequence as the most critical.

**Figure 4**. *GUT matrix*

| Process steps related to the failure points | Failure Points | G | U | T | Importance | Prioritization |
|---|---|---|---|---|---|---|
| Define which modality to subscribe to | Potential failure point of customer not understanding the difference between the clubs | 5 | 4 | 2 | 40 | 1 |
| Chooses the subscription plan type | Potential failure point for customer not understanding the payment terms of the subscription club | 2 | 3 | 1 | 6 | 5 |
| Onboards the member's area | Potential failure point for customer not understanding, in onboarding, the digital products offered by the club | 2 | 2 | 3 | 12 | 4 |
| Receives the first box and unboxes / assembles the kit | Potential failure point by having missing items in the box | 4 | 4 | 1 | 16 | 3 |
| Reads the book and magazine | Potential failure point for book not meeting customer's expectations | 4 | 4 | 2 | 32 | 2 |
| Requests to suspend next month's shipment | Potential failure point of customer not understanding the difference between suspension and cancellation | 2 | 2 | 1 | 4 | 6 |
| Has the subscription cancelled | Potential failure point for customer not having confirmed cancellation of subscription | 2 | 1 | 2 | 4 | 6 |
| Ship the kit | Potential failure point for shipping the kit to the incorrect address | 4 | 3 | 1 | 12 | 4 |
| Redirects member to relationship team calls | Potential failure point for directing members who do not want to be contacted by the company | 3 | 2 | 2 | 12 | 4 |

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*Actualidad y Nuevas Tendencias*
**Universidad de Carabobo** - Venezuela

**Año 16, Vol. VIII, N°30**
**ISSN: 1856-8327**
**e-ISSN: 2610-7813**

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The stages were then ranked according to the prioritization performed and, subsequently, related to the business processes, as described in subsection 4.3.

**Business process mapping**

To map the business processes, the BPMN methodology was used, applied through the Bizagi tool. The map was partitioned into 6 blocks, each one representing one of the company's areas. Only processes that are related to the final product offered by the company were registered in the mapping, therefore processes that are related to employees - such as human resources activities - were disregarded for not aggregating to the purpose of this study. Thus, the map depicts the company's macro processes that contribute to the delivery of the service offered. In addition, considering that this is a subscription club in which the service is recurring on a monthly basis, one can consider that the complete flow occurs during the period of one month. In Figure 5, the mapping can be seen in its final version.

Compared to the previous mapping using the Service Blueprint, in which the support processes for the activities of the subscription club's employees were documented, one notices that there are more registered activities - 17 more. This is due to the fact that in the Service Blueprint only the main processes are identified - the so-called support processes, which are the ones that have the greatest impact on the customer experience -, but not implying

that the others, identified only in the BPMN mapping, are not equally relevant, considering that the BPMN encompasses all the important processes for the business. It is worth mentioning that the mapping was developed by the authors based on their business visions and received contributions from leadership members in some areas of the company.

**Relating the mappings**

Resuming the objective of the study already presented in this article - to propose improvements in the business processes considering the failure points in the customer experience - the customer experience and business processes mappings already done had to be related. With the two maps ready, the next step was to correlate them through an adapted relationship matrix. The QFD methodology formed the basis for building this matrix.

In the matrix rows, the failure points of the customer experience identified in the Service Blueprint mapping and prioritized by the GUT matrix were arranged. In the columns, all macro processes identified in the previous stage were placed. From this, and with the knowledge of the degree of importance of each critical step, relationships were made between the critical phase related to the failure points and business processes. As previously mentioned, the scale used was a 3-point scale. Table 2 presents the results found after the classification of the relations between processes.

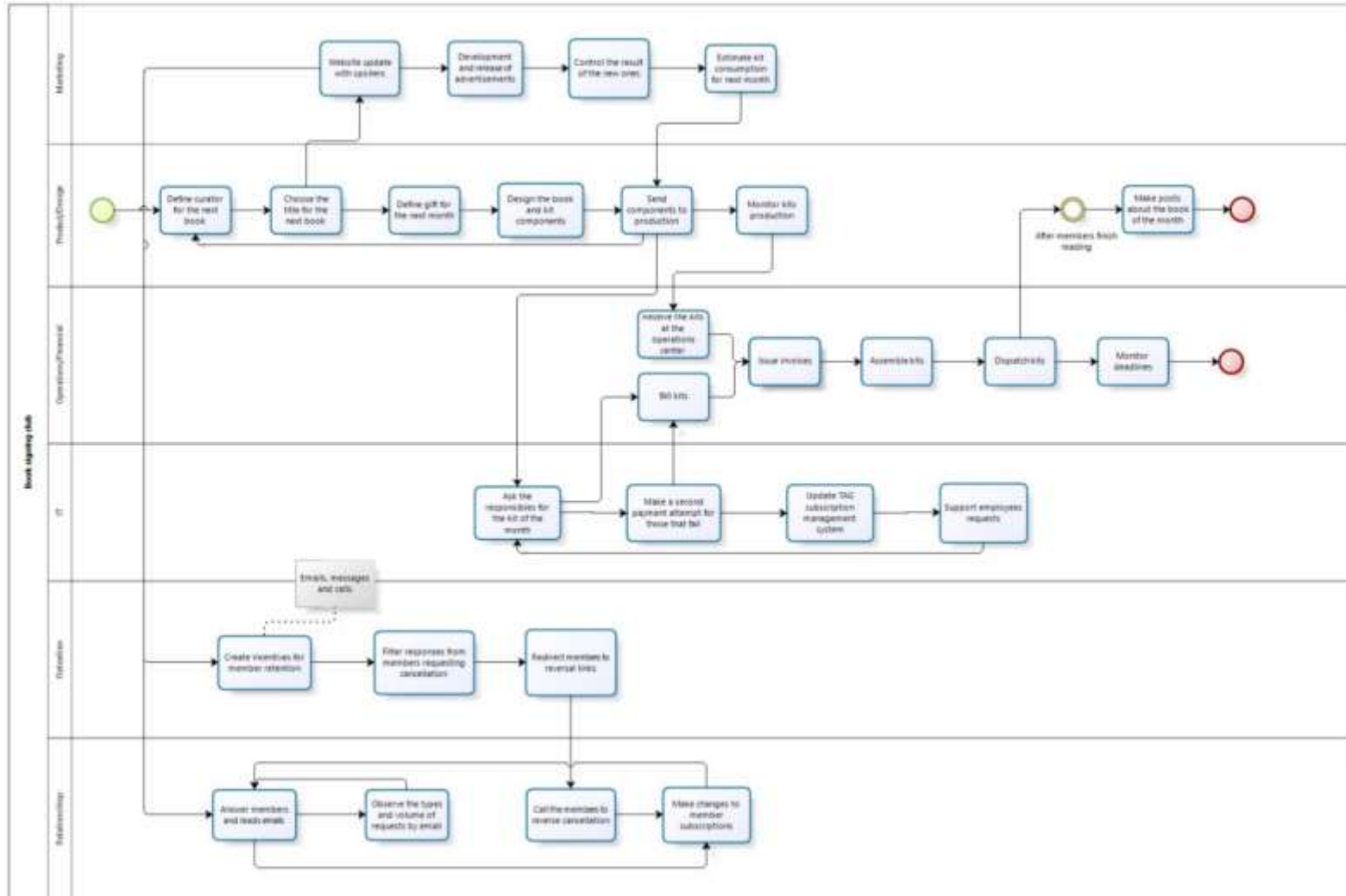**Figure 5.** *Mapping of business processes*

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**Table 2**. *Relationship matrix between business processes and critical steps*

| | Critical Steps - Customer Experience | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Defines which modality to | Reads the book and the magazine | Receives the first box and unboxes / | Ships the kit | Redirects member to relationship team | Onboards the member's area | Chooses the subscription plan | Requests to suspend next month's | Has the subscription cancelled | |
| **Grade of Importance - GUT** | 40 | 32 | 16 | 12 | 12 | 12 | 6 | 4 | 4 | |
| **Business Processes** | Relation | | | | | | | | | **Weight** |
| Define the next book's curator | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 9 | 1 | 746 |
| Choose the next book's title | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 9 | 1 | 746 |
| Define the giveaway of the month | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 202 |
| Design the book and kit components | 1 | 9 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 426 |
| Send components to production | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 234 |
| Track the kits' production | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 234 |
| Update the site with spoilers for the upcoming kit | 9 | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 1 | 490 |
| Create and publish monthly advertisements | 9 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 1 | 478 |
| Track newbie results | 3 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 230 |
| Project the kit's consumption for the month | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 314 |
| Receive the kits in the operation center | 1 | 3 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 330 |
| Invoice the kits | 1 | 3 | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 426 |
| Issue invoices | 1 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 258 |
| Assemble the kits | 1 | 9 | 9 | 3 | 1 | 1 | 1 | 1 | 1 | 546 |
| Dispatch the kits | 1 | 3 | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 426 |
| Monitor delivery deadlines | 1 | 1 | 3 | 9 | 1 | 1 | 1 | 1 | 1 | 266 |
| Publish posts about the book of the month in the app | 1 | 3 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 226 |
| Bill the active base for the month's kit | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 210 |
| Re-bill failed members | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 202 |
| Update the TAG subscription management system | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 162 |
| Provide support for employee requests | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 138 |
| Develop incentives for member retention | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 3 | 1 | 182 |
| Filter responses from members who requested cancellation | 1 | 1 | 1 | 1 | 9 | 1 | 1 | 1 | 1 | 234 |
| Direct members to reversal calls | 1 | 1 | 1 | 1 | 9 | 1 | 1 | 1 | 1 | 234 |
| Answer member and lead emails | 1 | 1 | 1 | 1 | 3 | 3 | 1 | 9 | 1 | 218 |
| Monitor email request types and volume | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 162 |
| Call members to reverse cancellation | 1 | 1 | 1 | 1 | 9 | 1 | 1 | 1 | 3 | 242 |
| Perform changes to members' subscriptions | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 9 | 194 |

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The ratings for each process were defined by summing the products between the ranking of the relationship between process and critical step (1, 3, or 9) and the degree of importance of each critical step, as shown in the following equation 1:

$$Pj = \sum PNij \times Ri$$

in which,

*Pj = importance of the business process of column j*

*PNij = rank of the relation of the critical step of row i to the business process of column j*

*Ri = importance level of the critical step of row i*

To provide a better visualization, a color scale was designed, highlighting the processes with the highest rankings and which, according to the method used, have the greatest impact on the critical stages of the customer experience. The processes with the five highest scores were selected and, as a result, the business processes that carry the greatest impact are, in their respective order: defining the curator of the next book, choosing the title of the next book, assembling the kits, updating the website with spoilers of the next kit, and elaborating and publishing the ads of the month.

From these five processes, four occur at the beginning of the club's internal flow, meaning that are the initial moments that establish and disclose the product to be offered and that determine all the following processes. Coincidentally, these processes are also the customer's first steps in the subscription club's journey and, for the case of the spoilers and ads, in the monthly experience, emphasizing the importance of this first moment after the acquisition.

The fifth process is directly linked to the member kit assembly stage, the moment that defines the way the physical product will be delivered to the customer's home. As the book box is the main product offered by the club, it makes perfect sense that these are classified as having a high impact on the customer experience, once subscribers can experience, apart from the surprise, different emotions when opening the customized product (Tao & Xu, 2017).

**Proposals for improvement**

Based on the results found, it was possible to observe the business processes that have the greatest impact on the customer experience. As the final stage of the study, the improvement proposals are fundamental to maintain these key steps accurately executed. However, it is known that looking at the entire process chain is important, not only at these critical phases, so the improvement proposals also encompass some processes that are not the priority ones. Using the 5W1H tool, some improvements were identified for the analyzed business processes, described in Table 3 and 4 below.

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**Table 3**. *Proposed improvements for the kit assembly process, website update with spoilers, and development and release of advertisements*

| Impacted process | Assemble the kits | Update the site with spoilers for the upcoming kit | Create and publish monthly advertisements |
|---|---|---|---|
| **What?** | Add a system of barcode validating items | Create a document determining the threshold for the amount of spoilers that can be published | |
| **Why?** | Ensure that all and the correct items are shipped | Do not release information that the member found to be a surprise | |
| **Where?** | Logistic center | Club Web site | Advertisement media |
| **When?** | At the time of kit assembly | Before the publication of spoilers and advertisements of the month | |
| **Who?** | Logistic center operators | Marketing and product teams | |
| **How?** | Create registration barcode for each SKU and add it to each product, while still producing the item. When assembling the kit, a station will beep the codes to confirm that it is in accordance with the production order. | Define what information can be published as spoiler (e.g. only the summary of the work can be published) and register it in an official club document. Clear up these limits to the member. | |

**Table 4**. *Proposed improvements for the processes of choosing the next book title and guiding members to reverse connections*

| Impacted process | Choose the next book's title | Direct members to reversal calls |
|---|---|---|
| What? | Review the schedule of literary genres sent out each month | Insert a member authorization step for receiving calls |
| Why? | Balance the genres of books sent out | Ensure that only members who have agreed to be contacted receive the call |
| Where? | Club office | Member's area |
| When? | Planning meeting | Signature club entry |
| Who? | Product team | Relationship and IT teams |
| How? | Establish new premises for the works that are mailed monthly (e.g. January's book needs to be light and fun). Look at whether the existing calendar meets these premises and, if necessary, update it | Send a pop-up to the member´s area to confirm authorization |

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The proposed opportunities are expected to improve the execution of the impacted processes and, consequently, the process chain as a whole.

## CONCLUSIONS

This study aimed to understand the impact of business processes on customer experience in a book subscription club and to observe improvement points. It allowed the company to guide the business processes that are critical for the customer experience, from the prioritization of the steps considered as failures and proposal of improvements to minimize friction during the customer experience. For this purpose, five main stages were conducted: (i) Survey of process mapping tools; (ii) Mapping of customer experience and failure points; (iii) Mapping of the company's business processes; (iv) Evaluation of the business processes influence on customer experience; and (v) Business process improvement proposals. The study was characterized as a case study of applied nature with a qualitative approach.

From a theoretical point of view, the study contributes to the literature on process mapping and improvement, based on an employed approach that combines tools for service and business process analysis, offering two analytical perspectives along with other prioritization and process improvement tools. This approach can be used by other companies interested in aligning their internal processes to the customer experience, and also by other authors who intend to enhance the approach used.

The results obtained from the study indicate that the processes with the major impact that happen in the back office influence the beginning of the customer's journey in the club, a key moment for the experience. The study also concluded that, by knowing which are the critical stages, it is imperative to have contingency plans to improve them or, alternatively, to always keep a more detailed overview than for the other processes. In general, the improvements presented sought to enhance these backoffice processes, for the purpose of improving the experience offered to the customer.

The analyses undertaken also made the company reflect on how to control the customer experience and business processes. As future developments, it is suggested, as a continuation of the work, the deployment of the proposed improvements in the company under study and monitoring of results through indicators. For the implementation of these enhancements, it is suggested to conduct a survey of the costs of new projects and compare them with the application efforts in order to prioritize the order of execution of the actions. A new round of brainstorming, this time with the participation of all directors of the company, would also be interesting to raise new opportunities for betterment of the processes currently executed.

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