MESG

MESTRADO EM ENGENHARIA DE SERVIÇOS E GESTÃO

Analysis and Improvement of Account Management Processes

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Master Thesis

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To my family,

Abstract

The present dissertation was developed within the context of the completion of the Master Degree in Services Engineering and Management, belonging to the Faculty of Engineering of the University of Porto. This document was produced throughout the course of a project carried out in a Portuguese company whose core business is the provision of a marketing automation software. The rapid expansion of the company's business and workforce, increasing product and service complexity and reduced time horizon in which these changes occurred motivated the development of a project in which the main objective would be analysing its business processes and assessing future improvement opportunities, in order to guarantee the company's adaption to the dynamic business reality in which it operates.

The project was executed in a period of five months, which was organized by four phases, each one with its intermediate goals. The initial phase consisted in understanding the company, namely its processes, organizational structure, evolution and business context through informal interviews of employees of the company, consultation of documents and information systems used and direct observation of process participants. Gathered information was documented using a hierarchical modelling approach. Account management processes were selected as target of the next phases of the project due to their strategic importance and potential impact on the company's performance. The next phase involved identifying and characterizing the improvement opportunities observed in each of these processes. Outputs of this phase served as basis for the third phase of the project in which improvement measures were formulated. The final phase of the project was related to the implementation of measures and evaluation of results achieved.

It was found that the difficulties felt by the company in this area were essentially due to the absence of automated workflows and connection between the CRM system used and the company's internal database management system, inefficient allocation of efforts and resources of account managers' efforts and lack of customer profitability practices, undermining the company's performance. Therefore, improvement suggestions that addressed each of these aspects were formulated, namely the automation of processes, introduction of a customer categorization system and reformulation of CRM pipelines. Finally, these measures were prioritized according their expected impact and difficulty of implementation. Given that, the development and implementation of a customer categorization system was initiated. Performance metrics were defined to assess the results achieved with improvement, once implementation is completed.

Resumo

A presente dissertação foi desenvolvida no seguimento da conclusão do Mestrado em Engenharia de Serviços e Gestão, pertencente à Faculdade de Engenharia da Universidade do Porto. Este documento foi produzido ao longo de um projeto realizado numa empresa portuguesa cujo *core business* é o fornecimento de um software de automação de *Marketing*. A rápida expansão do negócio e da força de trabalho da empresa, o aumento da complexidade de produtos e serviços e o reduzido horizonte temporal em que estas mudanças se concretizaram motivaram o desenvolvimento de um projeto em que o principal objetivo seria analisar os seus processos de negócio e avaliar oportunidades futuras de melhoria, de forma a garantir a adaptação da empresa a esta dinâmica realidade empresarial em que atua.

O projeto foi executado num período de cinco meses, organizado em quatro fases, cada uma com os seus objetivos intermédios. A fase inicial consistiu na compreensão da empresa, nomeadamente dos seus processos, estrutura organizacional, evolução e contexto de negócio através de entrevistas informais aos colaboradores da empresa, consulta de documentos e sistemas de informação utilizados e observação direta dos participantes no processo. A informação recolhida foi documentada através de uma abordagem de modelação hierárquica. Os processos de gestão de contas foram selecionados como alvo das próximas fases do projeto devido à sua importância estratégica e potencial impacto no desempenho da empresa. A fase seguinte envolveu a identificação e caracterização das oportunidades de melhoria observadas em cada um destes processos. Os *outputs* desta fase serviram de base para a terceira fase do projeto, na qual foram formuladas medidas de melhoria. A fase final do projeto foi relacionada à implementação de medidas e avaliação dos resultados alcançados.

Constatou-se que as dificuldades sentidas pela empresa nesta área se deveram essencialmente à ausência de fluxos de trabalho automatizados e à ligação entre o sistema de CRM utilizado e o sistema interno de gestão da base de dados da empresa, à ineficiência na alocação de esforços e recursos dos esforços dos gestores de conta e à falta de práticas de rentabilidade dos clientes, prejudicando o desempenho da empresa. Assim, foram formuladas sugestões de melhoria que abordaram cada um destes aspetos, nomeadamente a automatização de processos, a introdução de um sistema de categorização de clientes e a reformulação de pipelines de CRM. Por fim, essas medidas foram priorizadas de acordo com seu impacto esperado e dificuldade de implementação. Nesse sentido, iniciou-se o desenvolvimento e implementação de um sistema de categorização de clientes. Foram definidas métricas de desempenho para avaliar os resultados alcançados com a melhoria, uma vez concluída a implementação.

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I am grateful to everyone from the company for making me feel at ease and for enabling my integration into the organization. Some of them played an important role in the understanding of the company's problems and, therefore I want to acknowledge for their cooperation.

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List of Abbreviations

ABC – Activity Based Costing

API – Application Programming Interface

APQC – American Productivity & Quality Center

BMC – Business Model Canvas

BPM – Business Process Management

CPM – Customer Portfolio Management

CRM – Customer Relationship Management

EFQM – European Foundation for Quality Management

IP – Internet Protocol

SaaS – Software as a Service

SEO – Search Engine Optimization

SEM – Search Engine Marketing

ROW – Rest of the world

KPI – Key Performance Indicator

WfMS – Workflow Management System

1 Introduction

This section of the dissertation aims to provide an insight into the project, namely the context in which it was developed and the specific problems addressed. Then, research objectives and methods employed during the course of the project are introduced. In the end, the structure of the report is briefly presented.

1.1 Problem Description

The project was developed in a Portuguese company whose core business consists in the development of a marketing automation platform that enables customers to manage their digital marketing initiatives across several communication channels[1] .

Over the past recent years, the company has experienced a significant growth in terms of business volume with the expansion to new international markets - Latin America and Spain - , but also with the consolidation of its position in the domestic market.

Alongside its growing sales volume, the company has been focused on developing new services and improving the base product, by means of offering a wider range of features and customized solutions as a response to the increasing competition in the market through the pursuit of a differentiation business strategy. This process of developing a sustainable competitive advantage has required a big investment in terms of qualified human resources. In fact, over the past years, the number of employees has increased significantly, contributing to the escalation of internal complexity and coordination required. Moreover, this tendency is not evidencing signs of deceleration.

Taking into consideration these three factors - *business expansion, product and service development and increasing workforce* -, the reduced time horizon in which the changes occurred, and the absence of a previous internal study on this topic, the company realized the need of analysing its business processes and assessing future improvement opportunities, in order to adapt itself to this dynamic business reality.

These circumstances led to the formulation of a project in which principles from business process management are applied for the benefit of the company. Using this methodology, the project comprises four phases: characterization of the company's business, processes and information systems used; identification of the root causes of the problems it has been experiencing; formulation and analysis of improvement solutions; and implementation of the solutions generated.

The last three phases of the project were focused on the processes carried out by account managers, responsible for providing a premium level of service and guaranteeing the satisfaction of the company's corporate customers, due to their highly strategic importance and customer-facing nature. Every market in which *E-goi* operates has a dedicated account management team that works with customers to help them achieve their goals, potentiating their loyalty and development throughout their lifetime with the company. Each team manages customers using an autonomous and different working methodology as most of the processes carried out are not fully defined and automized yet, resulting in difficulties for top

[1] E-goi, Lda.

management to have a comprehensive view of the company's performance. Above all, information about customers is still very dispersed due to the incomplete integration of the CRM software used with the company's back office system and there is a lack of tools that enable the development of customer management strategies based on the treatment of real-time customer-related information, supporting long-term strategy execution and short-term actions.

In order to solve the problems identified, it was quickly recognized the need to improve the automated workflows the company had already established in the CRM system and develop new features to improve both the effectiveness and efficiency of the Account Management teams.

The main objective of this research was to identify problems in current processes and practices, develop possible solutions and implement them. Every improvement made to the CRM was operationalized by the internal resources of *E-goi*, in particular, *The Agency*[2].

1.2 Research Objectives and Questions

After understanding the motivations and nature of the project, the next step is to define the objectives of its execution. As previously stated, the main purpose of the research was to study the company's current situation, namely its business processes and information systems used, and develop future improvement opportunities to ensure its adaption to the dynamic business reality in which it operates. Nevertheless, despite focusing on the continuous improvement of the company to guarantee its long-term sustainability, the project's main focal point ends up being the customer, since improvement efforts were applied in intensive customer-facing processes, leading to a bettered customer experience and maintenance of the company's distinguished position in the market not just based on price, but on the quality of the service provided.

The definition of research questions is critical for the organization of the work to be executed and ensure the fulfilment of the research objectives throughout the course of the project. In this sense, this dissertation aims to answer the following research questions:

- *RQ1*: What types of problems are affecting the company's account management processes?
- *RQ2*: Which is/are the root cause(s) causing the problems identified?
- *RQ3*: Which current aspects of the account management processes can be improved?
- *RQ4*: How can improvements be implemented?

1.3 Methodology

This subsection details how work was planned and organized throughout the course of the project so that the research questions could be answered. As previously stated, the nature and scope of the project led to its decomposition into four distinctive phases, in addition to the use of both deductive and empirical methods.

[2] Internal team responsible for the development of customized projects for customers (e.g. integrations, plug-ins and web design)

The first phase of the project involved understanding the functioning of the whole company in terms of its structure, processes, surrounding context and evolution throughout the past years through the conduction of informal interviews with key stakeholders and process observation. This enabled the obtainment of qualitative data, specifically textual descriptions of facts observed, useful for the development of a generic characterization of core, support and management processes. Then, narrowing the focus of the analysis on account management processes, document analysis and automated discovery were used to obtain context-rich insights for the extensive depiction and diagnosis of these processes. Concurrently, the process of search and examination of relevant literature about the topics of the project was initiated.

In the second phase, a deductive approach was used through the application of concepts and methods already developed and studied by the vast set of authors to the data previously collected to identify improvement opportunities and discover their root-causes. At this stage, additional interviews were developed to complement the identification of problems.

In the third phase, a set of solutions were designed with the objective of mitigating or eliminating the problems previously identified. Additionally, improvement suggestions were analysed in terms of the benefits and difficulties of their implementation. Again, knowledge obtained from the literature consulted was used and complemented by additional interviews and workshops conducted.

In the final phase of the project, the implementation of improvement solutions was planned and initiated. Finally, performance measures were defined to evaluate the success of this phase.

1.4 Report Outline

This report is structured in accordance to the way the work was planned and executed throughout the course of the project, beginning with this introductory section.

The next chapter is dedicated to the review of the state of the art of topics connected to the project including an overview of the concept of business process, the main phases and techniques used in business process management initiatives, among others.

The third chapter is dedicated to the presentation of the company used as a case study and it is structured into two subsections: the first comprises an analysis of the company's current business situation and evolution over the years, in addition to a generic characterization of the business processes identified; the second part includes a detailed analysis and characterization of the account management processes.

The fourth chapter is dedicated to the identification of improvement opportunities, through the identification of the root causes and consequent problems it has been experiencing.

The fifth chapter is dedicated to the development of possible solutions to mitigate or eliminate the negative effects of the problems previously identified.

The sixth chapter is dedicated to the preparation of the implementation phase, including how it was organized, in addition to the suggestion of performance metrics to assess the success of the phase.

Finally, chapter seven is dedicated to the presentation of the conclusions extracted from the project and future work recommendations are made.

2 Theoretical Background

The purpose of this chapter is to briefly explore the fundamental aspects of business processes, providing an overview of the most commonly used methods to model business processes as well as how their performance can be measured.

Next, the emergence of the discipline of Business Process Management is presented, including the BPM lifecycle and the specificities of each of its phases.

Then, the evolution and origins of Customer Relationship Management are outlined, providing the basis for an overview on a strategic CRM constituent, Customer Portfolio Management.

Finally, a review of customer portfolio models that can be used to support internal resource allocation and boost business performance is made.

2.1 Business Process Fundamentals

Every day, organizations around the world strive to pursue their intended purpose. To do that, they have to perform business processes. They can be defined as a set of logically connected activities triggered by events that allow the transformation of resources - information, materials, among others - into valuable outputs for the stakeholders involved or the organization itself, ultimately reflecting how work is carried out inside them (Trends, 2013a). Similarly, Hammer and Champy (1993) defined a business process as "a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer". Hence, they can serve as source of competitive advantage as they can affect the way customers perceive the quality of service provided and the efficiency with which it is delivered (Dumas, La Rosa, Mendling, & Reijers, 2018).

Regardless of the definition one accedes to, the majority of authors highlight the repetitive scope of a business process as its prominent characteristic since it enables constant experimentation and identification of improvement opportunities (Andersen, 2007). Additionally, the fact that every business process has a customer, either internal or external, means that the majority of activities within a company can be considered as a business process or part of it (Andersen, 2007).

2.1.1 Classifying Business Processes

Business processes can be classified in several different ways. Companies often develop central specific processes, tailored to the tasks carried out, and document them thoroughly. Concurrently, a group of interest organizations such as the Supply Chain Council (SCC), the European Foundation for Quality Management (EFQM) and the American Productivity & Quality Center (APQC) work on providing cross-industry process classification models to be used by a large number of companies through the standardization of different business processes, namely regulatory or industry-specific, facilitating their identification and categorization (Andersen, 2007).

One of the most common categorization systems is the Value Chain Model, proposed by Michael Porter (1985). It separates business processes into two categories:

- *Core processes* (also referred as *primary activities*) are value-creating central processes as they belong to the organization's value chain and are directly related to the provision of products and services to the customers (Porter, 1985) - e.g. manufacturing, promotion and sales, delivery and after-sales.
- *Support processes* (*support activities*) are non-value-creating processes as they are not part of the organization's value chain, but rather enable the successful accomplishment of core processes (Porter, 1985) - e.g. Human resource management, accounting and IT management.

Later, a third category of processes was brought to light. *Management processes* contribute to the establishment of guidelines and strategic directions for the core and support processes, leading them to a higher level of performance (Dumas et al., 2018) - e.g.: Partner management, preparation of the annual budget and activity plan.

2.1.2 Modelling Business Processes

Business process modelling can be defined as the graphical representation of business processes or workflows. It can be used to translate one's understanding of the process to relevant stakeholders, as well as to test and explore alternative scenarios and clarify assumptions, objectives and surroundings (Andersen, 2007). Business process models can be used to document how the process looks and works today (*as-is version*), as well as the improved version of it (*to-be version*), and are often complemented with textual descriptions (Dumas et al., 2018).

Defining the most appropriate level of detail of business process models is a common concern of process analysts: if overly detailed, the model may become too difficult to understand, but if very generic, it may omit relevant aspects of the process. The most effective way to handle with this dilemma is to consider hierarchical modelling levels each one with a different level of detail (Andersen, 2007). This way, it becomes possible to present all the relevant information and, at the same time, keep each model simple enough so that it can be easily understood. Regardless, business process modelling should stop when value is no longer extracted from a given detail level (Sharp & McDermott, 2009).

There are several techniques for modelling business processes graphically (Andersen, 2007). The selection of the most appropriate one depends on the characteristics of the process being analysed as well as the purpose of the model. Nevertheless, any process model always highlights the work to be executed (*tasks*), the sequence of execution (*workflow*) and who executes it (*actors*) (Sharp & McDermott, 2009).

The following sections present in more detail some of the most commonly used modelling approaches.

Business Process Architecture:

Commonly referred as business process map, this type of model is regarded as the first level in the hierarchy, not representing an individual process, but rather how all the processes are connected inside the organization (Andersen, 2007). Hence, it can facilitate one's understanding about the interactions among internal departments and external stakeholders when performing such processes (Andersen, 2007).

Traditional Flowchart:

A flowchart can be defined as the graphical representation of the flow of activities in a process (Andersen, 2007). In its most basic form, different symbols are used to represent activities and arrows to highlight the connections between them, but there are several variants, depending on the information that needs to be depicted (Andersen, 2007). A traditional flowchart diagram offers more flexibility to analysts as elements are freely disposed according to the workflow, without dedicated lanes to the actors. It is a suitable modelling technique for transverse processes with multiple actors and complex workflows (Faria, 2017).

Cross-functional Flowchart:

Commonly referred as a *swimlane diagram*, a cross-functional flowchart represents the actors of the activities and the functional department they belong to, contributing to a more complete depiction of the process in comparison to a traditional flowchart (Andersen, 2007). All the tasks performed by an actor along a process appear in the corresponding lane, highlighting the flow across the organization and the participation of each one in the process (Faria, 2017). Hence, modelling business processes using swimlane diagrams can support analysts in the identification of unnecessary activities and interactions between resources, consequently allowing the formulation of improvements, namely responsibility redefinition or changes in the sequence in which activities are performed (Andersen, 2007). However, cross-functional flowcharts may not be the most suitable business process modelling technique when the processes being documented are very complex - e.g.: contain several decision points, loops and alternative flow paths, the same actor performs the majority of activities or there are many actors with punctual participations -, making it difficult for users to understand and read them (Andersen, 2007).

Responsibility Matrix:

A responsibility matrix (RACI matrix) can be defined as a graphical representation that highlights the roles of the actors involved in the process, something that is not possible using other modelling techniques, giving process analysts the opportunity to identify accountability misunderstandings, improve resource utilization and team dynamics (Jacka & Keller, 2009). Nevertheless, they do not offer any flexibility to process analysts as they do not allow the representation of complex workflows and multiple actors (Faria, 2017).

Typically, there are four levels of participation (Jacka & Keller, 2009):

- **Responsible** (R) refers to an actor that is responsible for performing a given activity.
- **Accountable** (A) refers to an actor that holds authority over an activity.
- **Consulted** (C) refers to an actor that ought to be consulted before the process can advance.
- **Informed** (I) refers to an actor that does not participate in the process, but needs to informed about the occurrence of a given activity.

2.1.3 Measuring business process performance

Once business processes are defined or redesigned, establishing performance measures is critical to ensure that business processes were properly developed and set up within the context of the organization, but ultimately are producing the desired outcomes (Ramias & Wilkins, 2010b). However, defining, implementing and using performance metrics can be very challenging due to the cross-functional nature of business processes, requiring interdependent decisions and actions, as well as the human judgements involved (Ramias & Wilkins, 2010a). Commonly cited pitfalls of this phase include lack of process performance accountability and understanding, absence of a structured approach when selecting metrics and adoption of measures with no connection to the business reality (Ramias & Wilkins, 2010b). Nevertheless, literature agrees that the establishment of performance measures should reflect the organization's strategy, vision, objectives and mission (Van Looy & Shafagatova, 2016).

When measuring process performance, a multiplicity of perspectives may be employed. According to Dumas, La Rosa et al. (2018), time, cost, quality and flexibility (i.e. the ability to react to change) are the most relevant perspectives used. Other perspectives referred in the literature include environmental impact, safety and business ethics (Andersen, 2007). Regardless, each one can be further deepened into a number of *process performance measures* (also referred as *process performance metrics, Key Performance Indicators, KPIs*), capable of quantifying the extent to which the organization achieves a specific goal (Van Looy & Shafagatova, 2016).

Performance measurement gained importance in both literature and practice, ever since organizations started to define their strategy in terms of results with the aim of becoming increasingly more efficient and effective (Van Looy & Shafagatova, 2016). Initial performance measurement systems proposed such as the DuPont scheme, introduced in 1919, privileged the use of financial measures to assess performance. However, between the 1980s and 1990s, there was a shift in this tendency with managers realizing that combining financial and non-financial metrics assured the satisfaction of both customers' and shareholders' needs (Kueng, 1999). The Balanced Scorecard (BSC), workflow-based monitoring, statistical process control and process performance measurement systems soon gained recognition in the field (Van Looy & Shafagatova, 2016).

While measuring the performance of a process, two fundamental dimensions - *efficiency* and *effectiveness* - should be considered (Azevedo, 2017). *Efficiency performance measures* are those directly related with productivity and costs incurred with the production and delivery of a given product of service (Azevedo, 2017). Examples include the availability and usage of critical resources, the material costs from external suppliers and the costs incurred by internal activities (production, delivery, storage, etc.). Conversely, *effectiveness measures* are those directly related to the quality of the product or service, i.e., the adequacy of the value proposition given customers' needs (Azevedo, 2017). Examples include responsiveness and delivery delay, compliance with deadlines, faulty products or services and customer satisfaction.

Process performance measures can also be divided into two different categories, *leading* and *lagging* metrics (Andersen, 2007). The first assess the factors that influence the future results of the company, anticipating its performance (Harmon, 2007). On the other hand, *lagging KPIs* measure the results (or outcomes) of process or of a business company as a whole, reflecting *posteriori* the consequences of the decisions taken previously by the company

(Harmon, 2007). Despite the different perspectives, these two types of performance measures should be used simultaneously, providing a more complete overview of the process (Andersen, 2007).

2.2 Business Process Management (BPM)

Business processes are the foundation of Business Process Management (BPM). This discipline includes an array of structured concepts, models, tools and techniques that allow the discovery, analysis, redesign, implementation and monitoring of business processes. Over time, BPM has incorporated the contributions of other related disciplines such as Total Quality Management (TQM), Lean, Six Sigma and Operations Management, and combined them with modern Information Technology to guarantee the alignment of business processes with the strategic goals and performance objectives of organizations (Trends, 2013b).

Business Process Management emerged from the evolution of work structures of organizations - workers' focus became narrower and their capabilities became increasingly specialized. In the beginning of the 20th century, Frederick Taylor released the book "The Principles of Scientific Management", bringing to light a new approach to labour division. After studying several manufacturing facilities, Taylor realized that training workers to perform specific steps of the production process led to increased production efficiency and, consequently, maximized profits. This labour division approach was implemented in other types of organizations, becoming the dominant form of organizing work. As a side effect, a new professional class emerged - managers - to supervise groups of workers and ensure their productivity. To differentiate their responsibilities, functional units, i.e., groups of people that work on a similar part of the production process started to be established inside organizations, highlighting a structural hierarchy. The first references to processes transversal to the departments of the organization - cross-functional business processes - started to appear in the mid-1980s (Sharp & McDermott, 2009).

In 1990, Michael Hammer published the revolutionary article "Reengineering Work: don't automate, obliterate" in Harvard Business Review, exposing a new management approach, Business Process Reengineering (BPR). In essence, over time, business processes and structures become obsolete given the changes in the organizational context. Hence, companies must question old principles and process structures in order to shift their focus on cost control to quality and innovation. Only this will allow them to keep up with the increasing market competitiveness (Hammer, 1990).

BPR requires looking at the business from a cross-functional perspective to identify how value is created for customers, instead of focusing on identifying improvement opportunities of current processes (Hammer, 1990). Besides this principle, Hammer defends that people interested in the outcomes of a process should be the ones to perform it, reducing management expenses in addition to the incorporation of embedded control mechanisms (Hammer, 1990). Moreover, when managing geographically dispersed resources and parallel activities, organizations should develop strategies to coordinate efforts and standardize communication channels (Hammer, 1990).

During the 1990s, several companies around the world used this approach to review and reengineer their processes. However, the excitement around BPR disappeared by the end of the decade, with organizations terminating their redesign initiatives as a result of three main factors according to Dumas, La Rosa et al. (2018). First, organizations were incorrectly naming every improvement project as BPR, even though some were not focused on business

processes. As the majority resulted in workforce reductions, operational staff developed a resentment feeling towards the approach. Additionally, the radical nature of BPR, early emphasized by Hammer (1990), was not adjusted to the majority of situations as they benefited from a more gradual procedure. Finally, the technology available at the time was not sufficiently capable of supporting incremental process-oriented improvement projects.

The publication of empirical studies demonstrating the increased performance and internal dynamics of process-oriented organizations compared to non-oriented ones, in addition to the appearance of process-centred IT systems such as Enterprise Resource Planning systems (ERP) and Workflow Management systems (WfMS), revived some of the principles postulated by Hammer and contributed to the emergence of BPM (Dumas et al., 2018). Nowadays, Business Process Reengineering is part of the collection of techniques available in the context of BPM.

Business Process Management can be seen as a continuous cycle that comprises six phases (Dumas et al., 2018): *process identification, process discovery, process analysis, process redesign, process analysis, process redesign and process monitoring*. *Figure 1* details the inputs and outputs used throughout the BPM lifecycle.

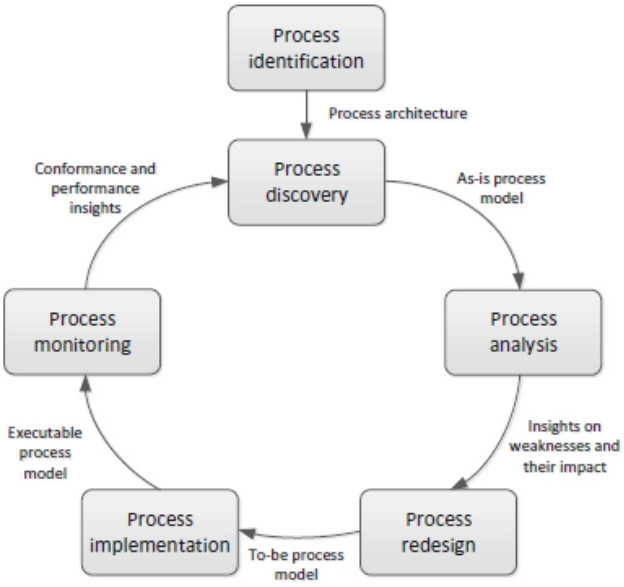


Figure 1 – The BPM lifecycle (Dumas et al., 2018)

2.2.1 Process Identification

When engaged in BPM initiatives, organizations start by defining the process architecture (or business process map). This includes identifying, determining the boundaries and relationships between the major processes (Dumas et al., 2018). The process architecture of an organization changes over time, reflecting changes in both internal and external context (Dumas et al., 2018).

Having defined or revised the process architecture, organizations have to select the business processes that will be target of the BPM activities. Several criteria can be used to guide this assessment. Davenport (1993) emphasized that an organization's resources and capabilities are decisive factors, given that most organizations do not own sufficient resources to address all processes simultaneously. Additionally, given their differences in terms of maturity and

importance (Dumas et al., 2018), organizations must understand the extent of internal change they will trigger to decide on which to commit to and invest in improving (Davenport, 1993). With each successful project, companies develop competences and gain experience with BPM, critical for future initiatives (Davenport, 1993).

Generally, the three more commonly used criteria for process selection are (Dumas et al., 2018): *strategic importance*, *health*, *feasibility*. The aim of the first criterion is to select processes critical to the pursuit of the organization's strategic goals. The second aims at identifying the more problematic processes that will benefit the most from BPM initiatives. The feasibility criterion intends on pinpointing the processes where results are more attainable and rational.

2.2.2 Process Discovery

In this phase, information about the current state of the processes previously selected is gathered and documented using process models (Dumas et al., 2018). Process discovery is an arduous activity due to the fact that processes are performed by several resources, which means that process analysts have to consult different domain experts with limited acquaintance to business process modelling techniques. Additionally, conflicting and overly detailed knowledge may be provided, requiring additional involvement of the analyst (Dumas et al., 2018).

Process analysts can use several methods to gather information about a process, grouped into three main categories (Dumas et al., 2018): *evidence-based techniques - document analysis, observation and automated process discovery -*, *interviews and workshops*. Each one has its own strengths and weaknesses (see *Table 1*). Hence, given budget and time constraints, analysts usually apply a mixture of methods to gather as much complementary information as possible (Dumas et al., 2018).

Table 1 - Process Discovery Methods: advantages and disadvantages (Dumas et al., 2018)

Method	Strengths	Weaknesses
Document Analysis	- Structured information - Independent from stakeholders' availability	- Outdated material - Wrong level of abstraction
Observation	- Context-rich insights	- Potentially intrusive - Stakeholders likely to behave differently - Only few cases and not all processes can be observed
Automated Discovery	- Extensive set of cases - Objective data	- Potential issue with data quality and level of abstraction - Data may not be available or be available only in part - Data extraction and preparation is time-consuming
Interviews	- Context-rich insights	- Requires sparse time of stakeholders - Time-consuming: several iterations required before sign-off
Workshops	- Context-rich insights - Direct resolution of conflicting views	- Requires simultaneous availability of multiple stakeholders - Time-consuming: multiple sessions typically required

2.2.3 Process Analysis

The aim of this stage is to detect opportunities for process improvement (Dumas et al., 2018). To do that, qualitative and/or quantitative techniques can be deployed to identify, document and analyse issues conditioning the performance of as-is processes, each one with its own requirements in terms of resources, complexity, among other factors (Andersen, 2007). Bearing in mind the project being developed, in the following sections some of the most suitable techniques are presented.

Value-added Analysis:

Value-added analysis focuses on analysing each step of a process in terms of the value it generates from a customer point of view, classifying them into three categories (Dumas et al., 2018):

- *Value Adding steps (VA)* are those that bring satisfaction and produce value for the customer;
- *Business Value Adding steps (BVA)* are those that are non-value-adding for the customer, but are relevant for the organization's operations to flow easily;
- *Non-value Adding steps (NVA)* are those that do not fit into the other categories.

Given this categorization, process analysts should focus their efforts on eliminating non-value adding steps during the next phases of the BPM lifecycle.

Root Cause Analysis:

Commonly referred as problem-solving techniques, the main goal of this vast family of methods is to identify and understand the possible causes of a problem or undesirable event that is preventing a given process from experiencing a better performance (Dumas et al., 2018). One of the most widely used diagrams specifically in the quality management field are *cause-and-effect diagrams*, also known as *fishbone diagrams*. Developed by Kaoru Ishikawa in the 1980s, this type of diagrams enables a greater understanding of the information gathered as causes are grouped into categories and sub-categories according to their degree of kinship. Common categories such as People, Machines and equipment, Methods, Materials, Measurement and Environment (organizational culture and structure, physical environment, etc.) for physical processes and People, Processes, Framework conditions and Work environment in case of service processes can be used as guidelines to this activity (Andersen, 2007).

Another well-known technique is the *Five Whys analysis*, often used as a complement to other techniques. Its main goal is to uncover the root cause of a given problem through the repetition of the question "Why?" until no new answers arise, isolating its causes from its characteristics. In generic terms, five iterations are enough to reach a root cause, but additional or fewer questions may be necessary depending on the cases (Serrat, 2017).

Pareto Analysis:

Commonly referred as the *80-20 rule*, the Pareto principle was first formulated by the Italian mathematician Vilfredo Pareto during the 1800s, stating that the majority of effects, often

around 80 percent, result from a small number of causes, often only 20 percent (Andersen, 2007). The Pareto chart is a technique used to graphically represent this biased reality, emphasizing the degree of severeness of each cause of a given problem, usually expressed in monetary or frequency terms. Hence, it can aid process analysts identify the more significant issues in which they should focus on the next phases of the BPM lifecycle (Dumas et al., 2018).

2.2.4 Process Redesign (or Process Improvement)

After detecting, analysing and possibly quantifying the processes' shortcomings, the aim of this stage is to develop possible solutions or improvements that will address the issues previously identified, consequently allowing the organization to fulfil its performance goals (Dumas et al., 2018). Generating new ideas and choosing the ones most suitable to address the problems identified are the first steps of this stage (Sharp & McDermott, 2009). To do that, creative techniques such as brainstorming, affinity diagrams, six thinking hats can be employed (Dumas et. al., 2018; Andersen, 2007). Also, improvement suggestions may have been provided by the stakeholders involved in the previous stages of the BPM initiative, so it is worth reviewing previous material collected (Sharp & McDermott, 2009). The next and final step is to develop and document the improved version of the process with the required level of detail (Sharp & McDermott, 2009).

There is a wide spectrum of process redesign methods available, as represented by the Redesign Orbit proposed by Dumas et al. (2018). Methodologies are classified according to three criteria: *ambition, nature and perspective*. The first refers to the degree of change it intends on generating; the second to the essence of the tools used; and the third to the point of view adopted by the redesign method (Dumas et al., 2018).

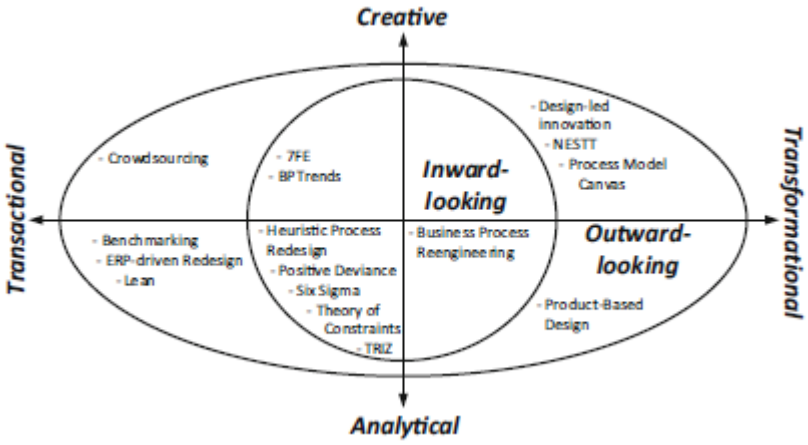


Figure 2 - The Redesign Orbit (Marlon et al., 2018)

2.2.5 Process Implementation

Once redesigned, the to-be version of the process is implemented, generally requiring organizational change management and/or process automation (Dumas et al., 2018). The first includes all activities necessary to change how process participants work, thus, guaranteeing a pacific transition to the improved version of process: clarifying the extent of changes necessary and reasons that justify them, when they will come into effect, provide training, etc.

On the other hand, the second refers to the implementation or refinement of IT systems with the aim of supporting process participants in the performance of tasks of the improved process: establishing assignment rules and prioritization principles, share required information with process participants, etc. According to (Andersen, 2007), the implementation phase can be disaggregated into several subtasks, each one equally important for the success of the initiative:

- Assess and prioritize the implementation proposals, based on the expected effects of the solutions developed and the necessary requirements.
- Develop an implementation plan, covering relevant elements such as the activities that must be carried out, the sequence in which they should take place and who is responsible for each one. Furthermore, a schedule for the implementation phase should be presented, as well as targets for the solutions being implemented and an estimation of the costs.
- Blossom a positive atmosphere for the required changes to occur, as studies have demonstrated that resistance to change is the leading cause of failure of change projects in organizations, despite using the suitable change approach (Mosadeghrah & Ansarian, 2014; Andersen, 2007). To overcome this issue, involving all the employees impacted by the process being improved and keeping them informed about the project, in addition to developing and following a communication plan are possible strategies to improve the acceptance of change.
- Execute the implementation itself.

2.2.6 Process Monitoring

Once implemented, data regarding the performance of the redesigned process is gathered and analysed to determine if the BPM initiative was successful (Dumas et al., 2018). In case of new issues, the output of this phase serves as input for new BPM initiatives.

2.3 An overview on Customer Relationship Management (CRM)

The emergence of the concept Customer Relationship Management (CRM) can be traced back to the 1990s with the rise of information technologies. Since then, it has become one of the most debated and changing topics in the field, now widely adopted by companies worldwide and regarded as a priority investment for business success (Buttle & Maklan, 2015; Bose, 2002). Throughout the years, numerous definitions of CRM have been presented, but a consensual one has not been yet reached (Buttle & Maklan, 2015). However, reviews of literature in the fields of Marketing, Management and Information Systems (IS) reveal three main perspectives of the concept: it can be viewed as a *business philosophy* (Ryals & Knox, 2001); a *business strategy* (Tamošiūniene & Jasilioniene, 2007) or *technological tool* (Bose, 2002). Examples of definitions given according to the three perspectives are gathered in *Table 2*.

Table 2 - Definition of CRM according to three different perspectives

Business Philosophy	"*CRM is a relationship orientation, customer retention and superior customer value created through process management.*" (Ryals & Knox, 2001)
Business Strategy	"*CRM is a strategic approach concerned with created improved shareholder value through the development of appropriate relationships with key customer and customer segment.*" (Payne, 2006)
Software System	"*CRM is an enterprise-wide integration of technologies working together, such as data warehouse, web site, intranet/extranet, phone support system accounting, sales, marketing, and production.*" (Bose, 2002)

Therefore, a comprehensive definition of CRM should include all three perspectives to be complete as the one proposed by Buttle and Maklan (2015): "*CRM is the core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit. It is grounded on high-quality customer-related data and enabled by information technology*.".

Relationship Marketing principles formed the basis for the emergence of Customer Relationship Management (Rababah, Haslina, & Ibrahim, 2011). During the 1990s, traditional Marketing strategies, focused on product/service promotion to maximize sales, were surmounted. According to Sheth and Parvatiyar (1995), this was a consequence of several macro-environmental forces that led to a shit in the marketing paradigm, now focused on the approximation between customers and producers: technological breakthroughs, namely in the Information Technology field; adoption of total quality programs by companies; growth of the service economy; organizational development processes granting empowerment of individuals and teams; and increase in market competitive intensity. With the need of developing new innovative ways of doing business suitable with this new business reality came a new perspective of Marketing proposed by Kotler and Armstrong (2008), in which the success of an organization is directly connected with its ability to develop strong long-term trusting relationships with surrounding stakeholders such as customers and suppliers, instead of focusing on establishing short-term and purely transactional relationships.

According to Payne (2006), Relationship marketing has three distinctive characteristics. First, in contrast with transactional marketing, relationship marketing acknowledges marketing activities as an inter-functional responsibility, transversal to an organization's structure (Philipson & Zineldin, 2007), resulting in increased levels of customer satisfaction as the correlation between internal processes and customer's needs is higher. Additionally, it emphasizes the maximization of lifetime value, forcing organizations to acknowledge that customers have different profitability levels and, consequently the need of deploying strategies to enhance target customers' profitability, ensuring their retention. Finally, if organizations aim at achieving long-term market sustainability, they must cultivate a network of relationships involving several stakeholders.

Naturally, as the focus of Relationship Marketing is ensuring customer retention through long-term satisfaction, companies can benefit from the implementation of a CRM system to develop an enduring competitive advantage (Frow & Payne, 2009).

The concept of Customer Management, i.e., strategies and tools used by the company to blossom relationships with both potential and current customers, is also directly linked to term CRM (Reis, 2018). In reality, some of the most common practices such as collecting, analysing customer information throughout the lifecycle and predicting customer behaviour can be facilitated and enhanced with the use of CRM systems (Chen & Popovich, 2003).

2.3.1 Types of CRM

Organizations can opt to deploy CRM systems for many different reasons. Nevertheless, they can take three main forms, each one capable of supporting and feeding information to the others (Payne, 2006):

- *Strategic*, focused on developing a customer-centric business perspective with the goal of winning and maintaining customers through superior value creation and delivery.
- *Operational*, focused on the automation of business processes involving front-office customer contact points such as customer service, sales and marketing.
- *Analytical*, focused on capturing, storing, organizing, analysing, interpreting and using customer-related data for strategic or tactical purposes.

2.4 Understanding Customer Portfolio Management (CPM)

According to Buttle and Maklan (2015), one of the most fundamental principles of strategic CRM is that customers should not be managed in the same way due to their differences in terms of needs, preferences and expectations. In this sense, Customer Portfolio Management is an essential constituent of strategic CRM, aiding organizations in the optimization of their overall business performance, through the aggregation of customers into clusters based on customer-related data. Then, tailored value propositions and customer management strategies can be developed and deployed for each customer segment. To achieve this, organizations have at their disposition a number of disciplines such as:

- **Market Segmentation**: Commonly used in Marketing Management, market segmentation consists in the process of dividing the market into relatively homogenous subsets of customers according to relevant variables, enabled by the use of information technology. In the context of CPM, the output of market segmentation is targeted to the identification of the value potential for each segment, as organizations want to serve the customers with the higher future profit potential.
- **Sales Forecasting:** Contrary to market segmentation, sales forecasting provides a look into the future by allowing companies to estimate customers' future purchases based on historical data. Several techniques can be employed according to the circumstances, providing useful information for CPM.
- **Activity-based Costing (ABC):** In order to understand and cluster customer according to their profitability, organizations need to trace both revenues and costs to customers. Hence, ABC can be considered a valuable discipline for CPM as it enables companies to trace costs to customers, according to the activities performed. ABC indicates the absolute and relative levels of profit generated by each customer, providing insights on actions that need to be taken to restore customer profitability and which value creating strategies pay off.

- **Customer lifetime value (CLV):** Customer lifetime value (CLV) can be defined as the present-day value of all net margins earned from the relationship with a given customer, providing insights on customers' future worth for the company, relevant for CPM.
- **Data Mining:** Data mining enables the detection of patterns and relationships in large and complex volumes of historical data through the use of statistically advanced techniques - clustering, neural networks and decision trees. After being trained to identify patterns on sample datasets, they can be useful to predict customers' behaviour from new data.

Customer Portfolio Management practices differ according the business context considered fuelled by the different characteristics of business-to-business (B2B) and business-to-consumer (B2C) markets, namely market size, individual dimension of customers, demand drivers, etc. For this reason, some disciplines are more suited certain a business context (e.g. activity-based costing can be more easily used in a B2B context, whereas data mining is more common to be applied in B2C contexts) (Buttle & Maklan, 2015).

2.4.1 An overview on Customer Portfolio Models

Customer portfolio models tailored to B2B relationships were introduced in the early 1980s with the intention of providing insights about the value of customers for a given company to guide internal resource allocation. Since then, a comprehensive body of literature regarding customer portfolio models has been developed, including extensive reviews and applications. According to Terho (2008), models reported can be analysed in detail in terms of the analytical procedures deployed or their managerial implications. The table in *Appendix A* shows the detailed analysis of the customer portfolio models according to the two perspectives.

Regarding the analytical procedures used in Customer Portfolio models, literature available is dominated by models that deploy a matrix and measurement approach to classify and cluster customers, using single variables such as relationship revenue (e.g. Storbacka (1997)) or composite dimensions that depend on several criteria such as strategic importance (e.g. Fiocca (1982)). In generic terms, customer value, namely from the company's perspective can be considered as the most important analytical constituent of customer portfolio models, followed by relationship characteristics, power in customer relationships and buying behaviour, respectively. Even though the last three dimensions do not represent value on their own, they can provide relevant insights for future interactions with customers and long-term strategy definition. However, the subjective conceptualization of value and how it should be measured has led to the adoption of various approaches in the context of customer portfolio models. Whereas C. Anderson, C. Jam, and Chintagunta (1993) measure value using purely monetary terms, Walter, Ritter, and Gemuenden (2001) make the distinction between direct and indirect value of customer relationships. According to Terho (2008), the analysis of the analytical procedures used in customer portfolio models reveals the strong future-oriented quality of CPM as the vast majority of models analysed include variables for the assessment of the expected customer value or future value potential and are not purely based on historical data. A final conclusion extracted from the analysis conducted is the fact that customer portfolio management should be used to balance the role of different customers in the provision of long-term value to the company, rather than just to optimize profits from each individual customer (Terho, 2008).

Shifting the focus to the analysis of the managerial implications of customer portfolio models, two main classes can be distinguished (Terho, 2008). The first group includes models with an operative nature, whose primary purpose is matching the resource allocation of a company to the value of its customers, leading to enhanced levels of present efficiency (e.g. Babakus, Cravens, Grant, Ingram, and LaForge (1996)). On the other hand, the second group includes models with a strategic nature, whose primary purpose is to understand which customer relationships should the company develop and in what direction should that happen, leading to long-term effectiveness (e.g. Fiocca (1982)). Again, the future-oriented quality of CPM is evidenced by the implicit perspective of developing the current portfolio structure to assure the satisfaction of the company's long-term goals.

Thus, it is possible to conclude that resource-allocation strategies should be outlined considering the adjustment of current customer value and treatment given (*matching focus*) and future relationship development needs to assure a balanced customer portfolio (*strategic development focus*) (Terho, 2008).

3 Case Study Description

In this chapter, the first section is dedicated to the presentation of the company used as case study in addition to an analysis of its current situation.

After understanding the company and the context in which it operates, the second section of the chapter provides an overview on business processes and how they interact to accomplish its mission and vision. In the first subsection, the company's process architecture is defined and explained. Due to the nature of the project and the processes themselves, only a restricted number can be chosen for further phases of the BPM lifecycle. In the light of this fact, the second subsection provides an overview on process selection, namely motivations, criteria used and results. Then, the processes selected as targets for the next phases of the project are analysed in detail, specifically: *process activate customer*, *process monitor customer and process expand & retain customer*.

3.1 Company and Business Overview

3.1.1 Company Presentation and Evolution

Founded in 2008, E-goi, Lda. is a Portuguese company that developed a Multichannel Marketing Automation tool that allows customers to create integrated actions across multiple channels - *Email*, *SMS*, *SmartSMS*[3], *Voice*, *Push Notifications*[4] and *Web Push*[5] - to communicate with their database. This communication is targeted as the platform captures and processes the behaviour of customers/subscribers, enabling companies to react automatically to their actions and adapting the promotional content and format given the final customer's preferences, thus enhancing the engagement. In addition, customer databases can be segmented and managed, with the support of analytical and behavioural reports the platform provides.

The company's vision is to reach a connected reality between final customers and brands, and customers and suppliers, creating synergies that allow greater satisfaction and value creation. Its mission is to create effective digital communication solutions with an intuitive usability that can be made available and implemented in any business reality in any geography, in order to maximize results, in accordance to the practices of respect for the customers and their privacy.

E-goi is a software product based on the SaaS delivery model, provided exclusively through the Internet. Access to the platform is free, with the creation of an account. Customers can use the platform for a trial period of 30 days. Then, they can choose the most suitable type of plan according their needs. If they are looking to make frequent campaigns and deliveries to their customers, they can subscribe a fixed monthly membership plan according to their database size (number of contacts). There is no minimum period of loyalty required, which enables customers to cancel at any time if not satisfied, as well as upgrade or downgrade their plans.

[3] Text message containing a link to a landing page

[4] Notifications via mobile devices

[5] Instant notifications via browser

There are three types of plans - *starter*, *pro* and *corporate* -, each one with its own conditions and benefits. Corporate plans are tailor made to fit each client's needs. They may include one or more channels, be post-paid, prepaid, with a contract (minimum of 12 months) or without a contract (upon payment of a setup fee). In addition, Corporate accounts have a dedicated account manager, responsible for monitoring, advising and supporting them. On the other hand, if customers wish to communicate more sporadically with their database, they can choose to buy the messages they intend on sending without any expiration date (SMS, e-mail, etc.). A free version of the platform is available for customers with less than 5001 contacts in their database.

The company holds full control of its value chain, ensuring all activities including R&D of new functionalities for the platform, marketing activities to promote the solution and the after-sales support services to follow-up the integration of the platform with the business realities of its clients. *Figure 3* details the company's structure.

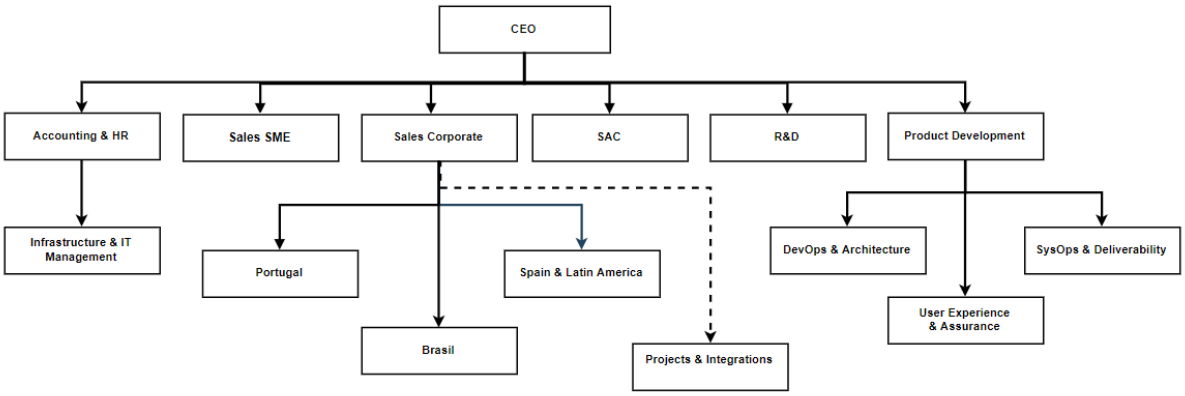


Figure 3 - Structure of the company

Since the beginning, the focus on R&D activities has been fundamental to ensure an innovative, easy-to-implement and compatible solution. Taking into account the highly competitive market in which it is located, E-goi has continuously seek to promote the development of innovative solutions and functionalities that meet the needs and business realities of the clients and segments where they operate, at a very competitive price. In 2018, the company became a pioneer in *SmartSMS* automation with the achievement of a utility model for the communication channel. Internally, several new services have been developed and evolved into sustainable ventures. In addition, the company has an internal team devoted to the development of tailormade projects according to customers' needs - *The Agency*.

Ever since its foundation in 2008, the company evolved from being an advertising agency to being fully focused on offering one Marketing Automation solution, the E-goi platform. Alongside this product evolution, the company was able to expand and consolidate its position in the domestic market and international ones across Latin America and Europe (Spain, Brazil, Colombia). To accompany this growth process, the number of employees evolved from 14 to 80 people in a ten-year time period and this trend is not evidencing signs of deceleration due to the recent investments made in expanding the company's offices. *Figures 4, 5 and 6* detail the evolution of the company in recent years in terms of workforce dimension and total revenue (national and international markets).

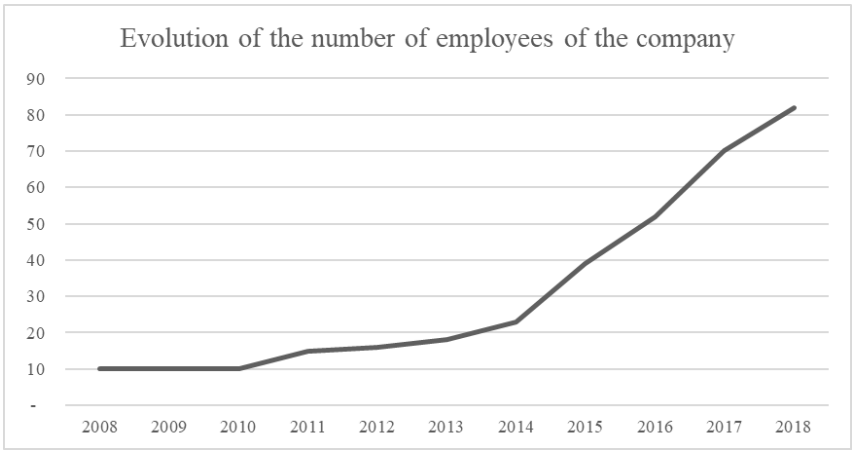


Figure 4 - Evolution of the company's workforce

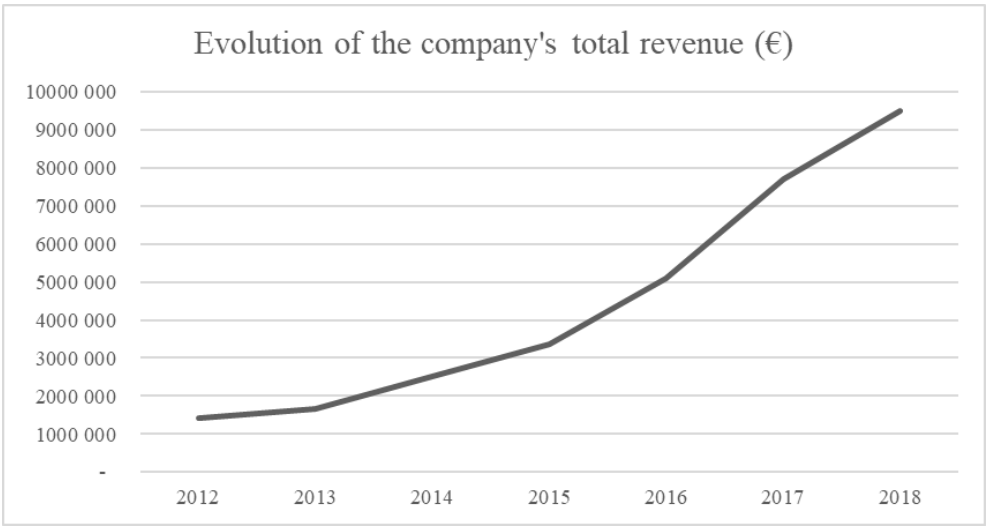


Figure 5 - Evolution of the company's total revenue (€)

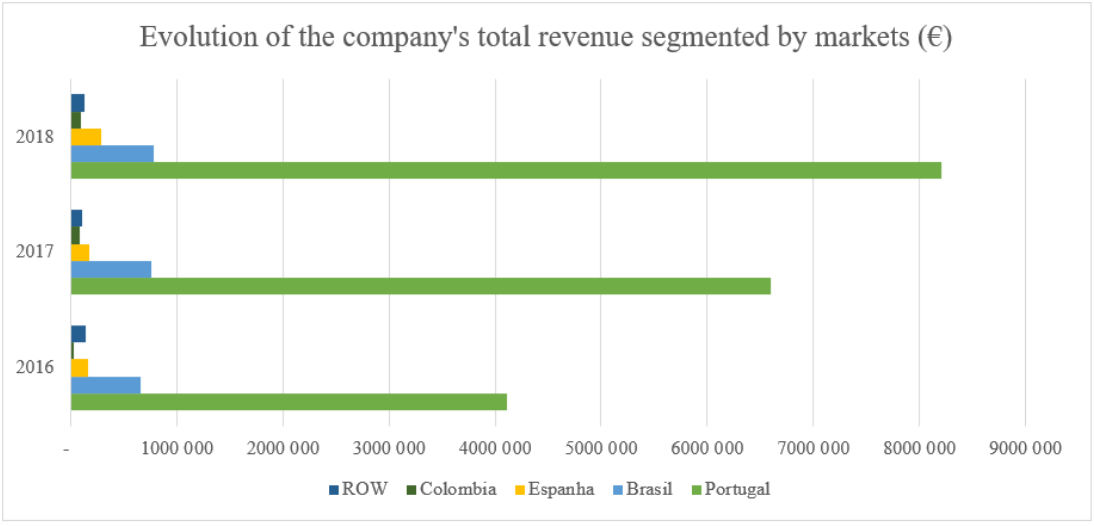


Figure 6 - Evolution of the company's total revenue, segmented by markets (€)

3.1.2 Business Analysis

Two tools were used to characterize the business context of the company: *Business Model Canvas (BMC)* and *SWOT analysis*.

3.1.2.1 Business Model Canvas (BMC)

A business model describes how companies create and capture value while delivering products or services for customers. The BMC is a visual tool used to characterize business models, supporting managers in the formulation and exploration of hypothesis about how to manage their business. It can be divided into nine building blocks that comprise the main areas of a business, which should be outlined following a logical sequence as follows (Osterwalder & Pigneur, 2010):

- **Customer Segments**: the types of customers the company intends on reaching and serving, given their distinct features and needs;
- **Value Proposition**: what the company is willing to offer to each customer segment to meet their requirements;
- **Channels**: how the company intends on reaching its customer segments to deliver its value proposition and communicate with them;
- **Customer Relationships**: how the company connects and interacts with its customer segments throughout their lifecycle;
- **Revenue Streams**: how the company generates cash from serving each customer segment;
- **Key Resources**: bundle of assets and infrastructures necessary to provide its value proposition to each customer segment;
- **Key Activities**: what the company needs to perform to provide its value proposition to each customer segment;
- **Key Partnerships**: network of alliances with other organizations that enable the provision of value to each customer segment;
- **Cost Structure**: costs the company incurs to provide its value proposition to each customer segment.

To characterize the business model of the company, a BMC was developed (see *Appendix C*). The most important aspects documented in the BMC are synthesized in the following ideas:

- The company targets two different customer segments - Corporate and small and medium companies (SME) - with distinctive value propositions. However, despite their different needs and features, there are common offers for both;
- Corporate customers are mainly reached through sales agents, whereas the remaining ones are through the website and partnerships with affiliates and resellers;
- The company establishes a relationship with its customer segments through content creation (blog, e-books), search engines (SEO and SEM), public relations, paid advertising (social media, AdWords, etc.), public relations initiatives with communication partners and the provision of customer support;

- Resources such as highly qualified human resources, market knowledge and technological know-how, hardware and software components (Data Centres, APIs, etc.) are necessary for the business model to work;
- Activities such as product development, provision of customer support, account management are critical to provide value for the customer segments;
- The revenue streams come mainly from subscription and usage fees paid by customers;
- Strategic partners help the company in many different ways such as customer base growth, development of new features of the product/service and access to key resources;
- The main costs supported by the company are related to the IT/Infrastructure maintenance, human resources and marketing/sales initiatives.

3.1.2.2 SWOT Analysis

To further understand the company and its business model, an analysis of its strengths, weaknesses, opportunities and threats (SWOT) was conducted (see *Appendix D*). This tool summarizes the relevant aspects regarding the internal and external context of the company, highlighting their impact on strategy development. Managers use it as basis when defining future courses of action, anticipating how the company's strengths and weaknesses will deal with the changes in the business environment (Johnson, Scholes, & Whittington, 2008).

3.2 "As-Is" Characterization

After understanding the company and its business, it is important to comprehend how the company operates internally to create and provide value to its customers.

This subchapter includes two subsections: the first is dedicated to the generic characterization of the company's business processes through the definition of the process architecture; the second is focused on the detailed and extensive analysis of the three processes selected as targets for the next phases of the project.

3.2.1 Process Architecture analysis

As previously referred, informal interviews with key stakeholders, namely process owners and observation of employees performing their daily tasks and processes were useful to develop a generic picture of the company's value chain, represented in *Appendix E*. The following core processes were identified:

- **Generate Demand**: this process is triggered by the need of driving the awareness and interest of target customers with the purpose of generating revenue. It includes activities such as the definition of customer profiles, message and distribution plan across different channels, delivering visitors that potentially will start using the platform.
- **Acquire Customer - SME**: this process is triggered by the deployment of demand generation strategies. It includes capturing e contacting leads, as well as, converting tester users, delivering new starter or pro accounts.

- **Acquire Customer - Corporate**: this process is triggered by the deployment of demand generation strategies or the identification of a potential customer by the sales manager. It includes collecting and contacting leads, as well as, negotiating and closing the deal, delivering new corporate accounts and the attribution a account manager to each.
- **Activate Customer**: this process is triggered by the attribution of an account manager to a new corporate account. It includes welcoming the new customer and setting up the users to start working with the product, delivering a communication plan and a business potential assessment.
- **Monitor Customer (Corporate)**: this process is triggered by a notification for customer follow-up to ensure that their needs and expectations are being met by the product and service. It includes evaluating the customer's account (usage, payments, etc.) and contacting them, delivering customer feedback.
- **Expand & Retain Customer**: this process can be triggered by many events - e.g. identification of a business opportunity for customers to increase the initial plan they contracted, approximation of the corporate customer's contract renewal date, among others. It includes opening a new deal, gathering information to develop a proposal, its presentation and gathering the customer's feedback to close the process, delivering an increase in the value of the customer for the company or its continuity with the company.
- **Monitor Customer - SME**: this process is triggered by the automatic opening of a new ticket on Live Agent to follow up with customers, ensuring that their needs and expectations are being met by the product and service. Depending on the plan contracted, it may include setting up the customer, monitoring renewals and pending movements, delivering the continuity of starter or pro customers with the company.
- **Support Customer**: this process is triggered by the need of clarifying and helping both potential and effective customers when they are experiencing problems or doubts regarding the product/ service. Depending on the mean of contact, the main activities may differ, delivering satisfied customers.
- **Product Development**: this process is triggered by the need of continuous product improvement and development. It includes processing, resolving, reviewing and deploying different types of issues on Jira, delivering an updated version of the product.

The support processes that stand by the core processes of the company are the following:

- **Control Finance & Accounting**: this process aims at guaranteeing the financial sustainability of the company through the monitorization of costs, revenues, cash flows and investments.
- **Manage Human Resources**: this process aims at potentiating the employees' performance to achieve the organization's strategic goals.
- **Ensure Working Conditions**: this process aims at maintaining the physical and IT infrastructures to ensure they keep up with the requirements and evolution of the business.

The company's management processes are defined as following:

- **Manage R&D activities**: this process aims at planning and controlling activities related to research and development projects and initiatives.
- **Manage Partners**: this process aims at selecting viable partners for the development of the company, as well as monitoring, supporting and training partners to potentiate the achievement of results.
- **Develop Mission & Strategy**: this process aims at planning and monitoring the implementation of strategic actions for business and company development.

After describing the company's core, management, and support processes, it is necessary to identify who performs them, and define the kind of responsibility that is attributed to each functional role. The stakeholders involved in the company's core processes are represented through the following roles:

- **Team Leaders**: They are responsible for managing all aspects concerning a certain team - resources, people, projects, among other things - and providing guidance, ensuring the satisfaction of goals.
- **Country Managers**: They are responsible for managing all aspects concerning a certain market: marketing and product mix adapted to it (based on customer behaviours and needs, competitors, etc.), quality control (support provided, compliance of team processes, commercial speech, etc.), special projects for clients and also the network of resellers and affiliates, among other elements.
- **Sales Managers**: They are responsible for raising new clients, communication and commercial partners, acting as an interface between them and the rest of the company. This includes prospecting and monitoring proposals until their closing.
- **Account Managers**: They are responsible for managing everything related with corporate customers, ensuring their satisfaction and lifetime with the company: up-selling and cross-selling, renewals, training and consulting, among other aspects.
- **Support Agents**: They are responsible for providing support to potential and effective customers across all channels, acting as an interface between them and the rest of the company just like sales managers. There are three levels of agents that ought to be respected and cannot be circumvented, i.e., if a ticket requires level 3 intervention, it will have to pass through level 1, level 2 and level 3. Nevertheless, answering the customer is always the responsibility of the original support agent, so the ticket must always return to him/her.

After identifying the company's core business processes and understanding the different roles of process participants, information gathered was systematized in the form of process profile worksheets, represented in *Appendix F*.

A process profile worksheet is a tool used to aggregate critical information collected throughout the process identification phase from various process participants, supporting modelling efforts and process analysis (Jacka & Keller, 2009).

3.2.2 Overview on Account Management processes

As previously mentioned, after identifying, delimiting and understanding how critical processes are connected, given the restricted period of the project and internal resources available, the next step involved selecting which processes would be the target of the next phases of the project. In this case, *strategic importance* was the criterion adopted, resulting in the selection of three processes - activate customer, monitor customer and expand & retain customer - connected to the management of the company's most strategically relevant customer segment, the Corporate segment. These processes are closely related to the company's pursuit of a customer-centric strategy, aimed at achieving market leadership based on the quality of service provided, guaranteeing high levels of customer satisfaction. In fact, over the past years, 70% of the company's gross sales, on average, came from this segment, which emphasizes the need of having core processes to address the needs and expectations of these customers.

Key account management (KAM) is a management approach widely adopted by business-to-business organizations focused on managing a specific group of customers in their portfolio, typically due to their superior strategic importance for the company's long-term sustainability, in terms of opportunities for growth, value co-creation synergies and business risk (Ivens, Leischnig, Pardo, & Niersbach, 2018). Thus, in the context of KAM, sales activities are not the priority of managers, but rather the development of mutually valuable long-term relationships through the provision of dedicated resources, tailor made offers and periodic contacts (Buttle & Maklan, 2015; HubSpot, 2019). Successful key account management takes advantage of the customer's challenges and opportunities, planning for success and providing the necessary support for them to accomplish their goals, leading to increased levels of customer retention and development. In essence, KAM can be viewed as mutual investment with the potential to generate significant benefits, but requires increasing levels of collaboration, involvement and commitment of both parties (Buttle & Maklan, 2015).

The following subsections present in detail each process selected as target for the next phases of the project. In addition to a textual description, each business process was modelled using a two-level hierarchical approach, assuring both the complete systematization of information previously gathered and additional one gathered through document analysis and automated discovery and easy comprehension of the models developed. The first level corresponds to a responsibility matrix and the second to a swimlane diagram.

Currently, account managers mainly work with two systems, using them for different purposes. First, *Bitrix24* serves as an internal collaborative tool to access features such as workgroups, meeting room scheduling and internal chat and as the operational CRM to manage the evolution of the relationship with the customer and information about them. The second system used is the company's internal database management system where the information concerning every active E-goi account is stored, feeding an interface called *Admin*. This system is used by practically every employee in the company on a daily basis, enabling account managers to:

- Upload plans and services manually;
- Issue movements for payment and make changes in payment settings;
- Assign, withdraw and analyse IP's of the customer's account;
- Check customer activities on the company's servers, such as how many are importing or sending campaigns on a particular server;

- Access directly to the customers' account without needing a login, for technical support purposes.

Sales team employees work every day with four objects in the CRM system: *leads*, *deals*, *companies* and *contacts*. The first one keeps records of every potential customer; the second one of every proposal and business opportunities grasped; the third contains every record of paying customers and interactions made with them; the fourth keeps records of every person contacted. Therefore, these four objects are connected in the following way: one company is associated to one lead and, at least to one deal and one contact. *Appendix G* contains CRM interfaces used for each object.

3.2.2.1 Process Activate Customer

According to (HubSpot, 2018b), customer onboarding or activation can be defined as "*the nurturing process that gets new users acquainted with your product, (...) involves step-by-step tutorials, unlimited guidance and support, and milestone celebrations when a customer achieves success through your solution.*". Hence, the way new customers are introduced to the service and products influences their long-term perspectives and plans with the company. A successful onboarding process leads to an increase in customer lifetime value, reduces churn and has the potential transform customers into significant referral sources (HubSpot, 2018b). Each company must continuously invest in creating a solid onboarding experience, tailored to the needs and expectations of its customer segments.

In the company under study, this process is triggered by the attribution of an account manager to the newly acquired corporate account. After receiving this information, the account manager schedules a meeting with the sales manager to be briefed about the customer and every detail discussed during the negotiation phase. Next, and taking into consideration the information gathered, he/she finishes the configuration of the company account on Admin and confirms data available on the company profile in the CRM, previously inserted by the sales manager during the acquire customer process.

Then, the next step is to prepare to establish the first contact with the customer through a welcome email, introducing himself, scheduling a kick off meeting and, depending on the services and products purchased, explain the setups the customer must do in his account to start using the product. Common examples include domain validation, database cleaning and importation. During the kick off meeting, the account manager presents the product and its functionalities, providing training and guidance on the best practices. Additionally, he/she learns about the customer's goals and motivations to use E-goi.

After this introduction, the account manager monitors the customer's first actions via frequent analysis of the company account on Admin and contacts the customer to provide support if some problem is detected (e.g. lack of complete configurations). The next stage of the process is to follow and assist the customer during its first achievement. Normally, the account manager tries to know in advance when the customer will send its first campaign through the platform. Then, he/she monitors the company account on Admin, analyses the results of the action and provides feedback to the customer. In the final phase of the process, given all the information obtained from the customer, namely its desired outcomes, primary use cases and biggest problems, and the account manager's own business experience and empirical know-how, he/she makes a business potential assessment of the account and defines the future contact frequency given that assessment, creating customer follow-up tasks on the CRM system. *Appendix H* contains the detailed business process models developed.

3.2.2.2 Process Monitor Customer

One of the relevant functions of account managers is to accompany his/her customer portfolio, not only with the aim increasing their individual value, but also maintain their satisfaction and consequent, retention.

This process is triggered by a notification in the CRM system, alerting the account manager to the need of getting in touch with the customer to ensure that his needs and expectations are being met by the product and service, assess satisfaction levels and determine improvements. First, the account manager reviews the customer account, namely in terms of product usage (e.g. real consumptions), payments history (e.g. pending movements, overdue), results achieved (e.g. campaign results) and tries to identify possible problems and difficulties the customer may be experiencing. Furthermore, he/she aims at detecting ways of increasing customer development and loyalty.

After this comprehensive customer analysis, the account manager is ready to contact the customer, scheduling an appropriate time to do that. After talking to the customer and taking into account the feedback gathered, the account manager makes the necessary revisions, namely in the CRM and Admin. This process occurs recurrently throughout the customer's lifetime with the company based on the account managers' business potential assessment. Often, business opportunities are identified during these regular contacts with the customer and account revision protocols, triggering the process expand & retain customer. *Appendix I* contains the detailed business process models developed.

3.2.2.3 Process Expand & Retain Customer

Similar to the process of acquiring a corporate customer, this process is fully automated in the CRM system. There are four events that may trigger this process, representing business opportunities for the account manager: the first and second correspond to regular protocols such as account revision and contacts with the customer, the third is the contract renewal date approximation and the fourth is when the customer reaches the limit of the products/services purchased (e.g. database size, number of messages sent). Given the detection of a business opportunity, the account manager opens a deal in the company's profile.

Then, the next phase is gathering information to generate and send a new proposal for the customer. After a waiting period, the account manager contacts the customer to collect feedback. If the Deal is lost, the account manager has two options: terminate the sales cycle, indicating the motives that led to this unsuccessful result or leave the sales cycle on standby. Sometimes, this happens because the customer imposes a temporary objection to accept the proposal. A deal in this stage can be reactivated. In both cases, the country manager and team leader are notified and can advise the account manager on redefining his/her strategy. If the Deal is won, additional information must be inserted to generate a new contract and the account manager should send it to the customer to be approved and signed. Then, it should be attached to the company profile in the CRM system and the movement for payment should be generated in the Admin.

To complete this process, the account manager must update the customer plan in Admin. *Appendix J* contains the detailed business process models developed.

4 Problem Identification and Characterization

After developing a comprehensive vision of the company and its functioning, specifically on the processes selected for the next phases of the project, this chapter is dedicated to the identification of improvement opportunities (problems) resulting from the application of process analysis qualitative techniques previously referred in chapter 2, namely *root-cause analysis*, thus answering *RQ1* and *RQ2*.

The conduction of interviews, the observation of process participants performing their activities and, in some cases, the participation in the processes allowed the identification of the following problems and contributing causes, divided according to the process in question. Nevertheless, these processes are widely connected, thus meaning that problems detected have repercussions in the rest, which reflects the commitment and involvement necessary to build long-term relationships with customers, guaranteeing increased levels of satisfaction.

4.1 Problems in the Activate Customer process

As previously referred, this process is highly important to establish a strong and sustainable relationship from the start with the newly acquired customer.

Currently, this process is not automated in CRM system, despite the existence of a predefined set of protocols to be followed when onboarding a customer, given the services and products purchased and the origin market of the customer. This means that each account manager has to manually create its workflow in the CRM system, namely tasks and events, every time a new Corporate account is attributed to him/her to keep track of the progresses made. This requires additional efforts in terms of time and attention from the account managers, often resulting in inaccuracies or missing details discussed with the customer in the Company profile in the CRM. Given the account manager's extensive portfolio and consequent difficulty in keeping up with everyone, this may have repercussions in the future stages of the relationship with the customer.

The exchange of information between the sales manager and the account manager regarding aspects that were discussed throughout the negotiation phase can be considered as a critical activity with significant impact on both the short-term success of the customer activation process and long-term evolution of the company's relationship with the customer. Given that the account manager is not included in the customer acquisition process, the briefing with the sales manager is the first moment the account manager has to understand more about the customer, namely its business, products/services purchased, motivations and expectations, before reaching him personally. Currently, there is no framework defined concerning how this transfer should occur, expressing information requirements that have to be necessarily addressed by both employees, often resulting in the loss of future business opportunities, the generation of immediate obstacles for successful customer activation and decrease in customer satisfaction due to the omission of sensitive information for some reason during this phase.

Another improvement opportunity identified relates to the final activities of the process, in particular the business potential assessment of the customer carried out by the account manager. Presently, this evaluation is based on two factors: the information obtained from the customer side, namely its desired outcomes, primary use cases and biggest problems, and

primarily on the account manager's own business experience and empirical know-how. There is no set of criteria defined, as well as no framework to guide this activity. In the light of these facts, it is possible to conclude that this assessment is currently solely based on judgmental or subjective factors that vary from account manager considered, as interviews conducted have revealed. Additional improvement opportunities regarding this activity affecting other processes will be discussed in the next sections.

A generic flaw of this process identified relates to the fact that top management, namely the team leader and country manager are being excluded from the whole process, not being able to track the account manager and detect possible structural problems that may only manifest in advanced phases of the relationship with the customer.

In summary, problems and contributing causes identified in the process Activate Customer are systematized in *Table 3*.

Table 3 - Summary of improvement opportunities identified in the process *Activate Customer*

P1	Absence of information in the Company profile in the CRM	
	C1.1.	Non-uniform process
	C1.2.	Different case types
	C1.3.	Process not automated in the CRM
P2	Omission of information during the briefing with Sales Manager	
	C2.1.	Lack of a framework to guide the passage of information
P3	Ineffective business potential assessment	
	C3.1.	Judgmental and subjective analysis
	C3.2.	Lack of framework to guide this assessment
P4	Lately detection of structural problems	
	C.4.1.	Top management excluded from the process

4.2 Problems in the Monitor Customer process

As previously mentioned in the introductory chapter of this report, this process is one of the most relevant considering the increasing market competition. To assure the customer's needs and expectations are being met by the product and service provided, account managers need to proactively monitor closely their customer portfolio and provide support when necessary. Moreover, this process is crucial to detect future business opportunities and generate loyal customers.

Currently, account managers mainly work with two systems, using them for different purposes. First, *Bitrix24* serves as an internal collaborative tool to access features such as workgroups, meeting room scheduling and internal chat and as the operational CRM to manage the evolution of the relationship with the customer and information about them. The second system used is the company's internal database management system where the information concerning every active E-goi account is stored, feeding an interface called *Admin*. This system is used by practically every employee in the company on a daily basis, enabling account managers to:

- Upload plans and services manually;
- Issue movements for payment and make changes in payment settings;
- Assign, withdraw and analyse IP's of the customer's account;

- Check customer activities on the company's servers, such as how many are importing or sending campaigns on a particular server;
- Access directly to the customers' account without needing a login, for technical support purposes.

One of the biggest constraints in the company's current CRM system is the fact that it is not integrated with the company's internal database management system. This impacts negatively the ability of account managers to proactively monitor their customers in the sense that they have to regularly check customers' accounts in Admin to be able to extract insights on customer behaviour to be capable of responding in a timely manner to potential problems and doubts. A common example of this situation is when customers make changes to the contracted plan. As the two systems are not integrated, the only way the account manager has of detecting this alteration is through regular examinations of customers' accounts in Admin. In addition, the absence of automatic entry of information into the CRM brings an additional responsibility for account managers to maintain the information available in the CRM always updated to prevent actions based on data that does not portray the reality, impacting future business opportunities. Going back to the example previously given, if account managers do not update the Company profile in CRM with the changes occurred, cross and up-selling opportunities may be wasted.

Another improvement opportunity pertains with the fact that there are no automated workflows to remind account managers to follow-up with their customers. Currently, they have to manually create their workflow in the CRM system, namely tasks and events, to assure the accomplishment of such functions. Once again, this requires additional efforts in terms of time and attention from account managers to keep up with their portfolio, often resulting in the provision of a service does not live up to expectations and customers feeling neglected.

In addition, a further improvement opportunity identified concerns the fact that customer follow-up activities are not influenced or determined by the customer value for the company, resulting in an inefficient allocation of resources and efforts of account managers. Presently, the business potential assessment developed during the final phase of the customer activation process serves as guidance to define the contact recurrence, as described in *chapter 2.2.1*.. However, this assessment is not subject to revision throughout the customer's remaining lifetime with the company, meaning that customer behaviour and future business opportunities are not taken into consideration in this assessment. Given this, it is possible to conclude that the way this assessment is currently structured and carried out does not aid account managers in the execution of their daily tasks by improving their accuracy, driving targeted and data-based customer management strategy execution.

A final improvement opportunity identified is associated with the systematic overdue billing incidents registered recently. Despite the lack of formal records about these episodes and concrete statistics, interviews with process participants supported further qualitative analysis on the main cases detected, uncovering the fact these episodes were triggered by customer requests. What was happening is that when the payment deadline was approaching, customers contacted their account manager to extend the payment period for a longer period to avoid seeing their account blocked. Acceding to this request, account managers made changes to payment details in Admin to maintain immediate customer satisfaction levels, but then didn't reversed the alterations to the original conditions contracted. This led to customers not being notified to pay for periods longer than one year, undermining the company's performance. To

prevent the occurrence of similar events, since the beginning of April, account management teams implemented a corrective measure consisting in monthly meetings to go through every customer account and guarantee that billing is up to date.

In summary, problems and contributing causes identified in the process Monitor Customer are systematized in *Table 4*.

Table 4 - Summary of improvement opportunities identified in the process *Monitor Customer*

P5	Dispersed and unorganized information	
	C5.1.	Use of multiple platforms/systems
	C5.2.	Lack of connection between systems/platforms
P6	Lack of key information for decision-making	
	C6.1.	CRM and internal database management system are not integrated
P7	Inability to proactively track and manage customer accounts	
	C7.1.	Lack of customer follow-up automated workflows to ensure timely contacts
	C7.2.	Lack of connection between customer value and the frequency of contact to ensure that account managers follow up with customers in a targeted manner
	C7.3.	Lack of information about pending payments
	C7.4.	Redundant storage of data and inconsistencies across systems

4.3 Problems in the Expand & Retain Customer process

Currently, this process is being applied to achieve two different outcomes: the first is to ensure the retention of the customer, achieved through the renovation of the contract and the second is to ensure the development of the customer, achieved through up-sell and/or cross-sell activities. Extensive analysis on triggers, activities empirically carried out and results generated by these two facets of the process have revealed structural differences that are hindering the company's performance.

Starting with the retention facet, maintaining corporate customers over a long period of time is the result of the work developed by the account manager, specifically in terms of the quality of service provided and development of the customer's capabilities (Buttle & Maklan, 2015). At the moment, account managers experience difficulties in managing contract renovations, which has been leading to the loss of business opportunities. This problem is a result of a set of contributing factors, specifically:

- The existence of a single deal pipeline in the CRM that includes these two different case types, which makes it impossible to distinguish and, consequently monitor deals that are for retention purposes and those that are for customer development purposes and provide the necessary treatment.
- The fact that in the CRM system it is only possible to insert one renovation date, which is not adjusted to the majority of current contracts with corporate customers. Frequently, products/services purchased have the different renovation dates, making it difficult to manage the renovation of every item of the contract individually.

Given the previous constraint referred, it is only possible to generate one recurring deal in the CRM to remind the account manager about the renovation of the contract, which is not compatible with differentiated renovation dates of products/services. To overcome this limitation, account managers create manually their workflow in the CRM system, namely tasks and events, to be reminded that the end of contract is approaching. Naturally, this

system does not generate the best results for the company when there are several customers in the account managers' portfolios and all with different contract specificities.

Moving the focus of the analysis to the development facet of the process, cross-selling and upselling are strategies that enable the company to increase the value of its existing customers, driving its overall profitability as retained customers are easier to sell to, are prone to purchase more frequently, as well as spend more each time, when compared to acquiring a new customer (HubSpot, 2018a). However, this can be a demanding task for account managers as it requires paying constant attention to signs and behaviours to spot business opportunities, but also involves being sensible to customers' goals and needs to help them in the best way possible. Similarly, to customer renovations, account managers have been experiencing difficulties in selling superior and/or complementary products/services to customers, which has been leading to the loss of business opportunities. This problem is a result of a set of contributing factors, namely:

As previously discussed in chapter 4.2., one of the biggest constraints in the company's current CRM system is the fact that it is not integrated with the company's internal database management system. This leads to account managers not having access to real-time information about customer behaviours directly in the CRM system, namely when customers change the contracted plan (upgrade or downgrade) and/or experiment new functionalities, resulting in late interventions with the customers, which in turn has negative repercussions on the company's performance.

Currently, the only event that triggers the notification of account managers in the Admin is when the customer's account is blocked for reaching full database capacity. This situation can be challenging for account managers as customers start eliminating contacts from their accounts in an attempt of expediting the resolution of the problem when they are not interested in upgrading the contracted plan.

In summary, problems and contributing causes identified in the process Monitor Customer are systematized in *Table 5*.

Table 5 - Summary of improvement opportunities identified in the process *Expand & Retain Customer*

P8	Loss of Business Opportunities	
	C8.1.	Lack of customer renovation oriented automated workflows to ensure customer retention
	C8.2.	CRM is not fed with information about customers' real consumptions
	C8.3.	Lack of information about pending renovations
	C8.4,	Lack of information when the customer experiments new functionalities

4.4 Additional Considerations

This subchapter is dedicated to identification of improvement opportunities transverse to the three processes formerly subjected to thorough analysis.

The first one is related to the absence of systematized customer feedback, namely the degree to which corporate customers are satisfied with a given product, service, or experience. This is a powerful business growth driver as it enables companies to continuously transform their products and services into something that customers truly want and value, ensuring that they will continue to invest time and money into the organization. Since the corporate customer segment represents the majority of the company's sales volume, by not gathering these

customers' perceptions, the company as a whole is missing out on opportunities to improve itself and losing business opportunities.

The second improvement opportunity identified is associated with the fact that employees are not aware on how to proceed in certain situations. Further analysis revealed that this is a result of a set of contributing factors, namely:

- Lack of documentation available about account management processes and protocols to be followed by employees, especially relevant for new team members given the company's intense growth strategy;
- Automated workflows in the CRM system are not clearly defined, containing vague descriptions and inconsistencies in terms of language used. Again, this is significant granting the company's evolution and growth in recent years;
- Information fields available in the Company general section are disorganized, hampering account managers' in the execution of their daily tasks.

The third improvement opportunity recognized is connected to lack of records available about incidents occurred, which negatively affects top management's timely capacity of identifying and understanding the cause of problems occurring, thus undermining the company's performance.

The final improvement opportunity identified is linked to the fact that the company does not keep track of costs incurred with customers, which has negative repercussions in the company's business performance, in addition to an inefficient allocation of resources and efforts on the account managers' behalf. Key account management requires commitment and investments on the company's behalf, often leading to increased costs and lower margins to provide the experience required by the customer. However, using the right strategy, it can be an enormous driver of sales volume. If customers do not show signs of ever becoming profitable or strategically significant, the company should consider divesting on them to target the ones that see value in its products and services and want to invest in them.

In summary, transversal problems and contributing causes identified are systematized in *Table 6*.

Table 6 - Summary of transversal improvement opportunities identified

P9	Employees not aware on how to proceed in certain situations	
	C9.1.	Lack of documentation about account management processes and protocols
	C9.2.	Automated workflows in the CRM system are not clearly defined
	C9.3.	Lack of training and clear instructions for process participants
P10	Opinion of the customer is not known	
	C10.1.	Lack of feedback collection-oriented protocols
P11	Company's business performance is being undermined	
	C11.1.	Provision of the same service level to every customer
	C11.2.	Lack of tracking regarding the costs of maintaining customer relationships
	C11.3.	Incidents/problems are not registered/signaled

5 Proposal and Development of Solutions

After the identification of opportunities for improvement and understanding their contributing causes, the next phase of the project consisted in the development of solutions to address the problems identified, thus answering *RQ3* and *RQ4*. Again, concepts and methods for process redesign introduced in the second chapter of this report served as basis to develop feasible and adjusted solutions given the company's strategy and business context. Nevertheless, additional interviews and the conduction of workshops with process participants aimed at generating creative solutions were fundamental for the accomplishment of this phase of the project, following a more conventional process redesign approach.

For each process, a set of proposed actions (A) are presented with the aim of facilitating account managers' daily activities, leading to the narrowing of relationships with customers.

Moreover, given the restricted period of the project and internal resources available, not all solutions proposed were selected to be implemented. In this sense, the final stage of this phase of the project involved analysing the proposed actions in terms of two factors - *difficulty of implementation* and *expected impact* - with the aim of prioritizing the ones to be put to action within the scope of this project.

5.1 Activate Customer process

In order to address the improvement opportunities identified in chapter 4.1, the following proposed actions were developed:

(A1) Automation of the process

The automation of this process will be achieved through the development of a customer activation workflow in the CRM system adjusted to the services and products referred in the deal that won, maintaining the attribution of an account manager to the newly acquired corporate account as trigger. This solution will contribute to (Dumas et al., 2018):

- Reduce the manual workload of account managers as they do not have to spend time creating their customer activation workflow in the CRM, which consequently leads to a decrease in the total time necessary to onboard the customer;
- Guarantee execution transparency, enabling top management to track progresses made at any time (e.g. which work items have been completed by which resources and at what time new cases enter the process).
- Increase coordination between process participants, through automatic work routing, signalling when it is completed;
- Guarantee the systematization and gathering of all relevant information to carry out each particular task;
- Ensure that the process is carried out in precisely the way that it has been designed, generating a consistent and stable standard of outcomes, given the customers' specificities.

(A2) Development of a customer categorization system that dictates the automatic generation of follow-up tasks given the category in which the customer fits

As previously stated in *chapter 2.4.*, a key strategic CRM principle is that customers should not be managed in the same way, given their disparate needs, preferences, expectations, revenues generated and costs the company has to incur to serve them (Buttle & Maklan, 2015). Therefore, the company can leverage from this fact and optimize its business performance by understanding these differences and adjusting the service provided based on them through the development of a customer categorization system that dictates the automatic generation of follow-up tasks given the category in which the customer fits. This solution will contribute to:

- An optimal allocation of account managers' efforts and resources available, enabling the company to capture more value from each customer;
- Reduction of the manual workload of account managers as they do not have to spend time creating customer follow-up tasks and events in the CRM, which consequently leads to a decrease in the total time spent on administrative activities;
- Development and pursuit of customer management strategies grounded on real-time analysis of customer-related data, namely customer behaviour, anticipating future needs
- Provision of a service level that is closely aligned with the customers' needs and expectations, thus increasing their satisfaction.

Given the company's business context and specificities and literature available about customer portfolio models, a specific customer categorization system was built to support and potentiate internal resource allocation. Nevertheless, this solution implies significant changes, namely in terms of information systems and internal processes, detailed in *chapter 6. 1.*.

5.2 Monitor Customer process

In order to address the improvement opportunities identified in *chapter 4.2.*, the following proposed actions were developed:

(A3) Introduction of customer-related reporting tools

To further complement this process and enable account managers to always stay up-to-date in terms of the state of each customer, the introduction of customer-related reporting tools, namely through customized CRM dashboards will be highly positive. Benefits of this solution include:

- Provision of real-time data to account managers, enabling the timely detection of problems and changes in customer behaviour;
- Development of data-based customer management actions, improving accuracy of account managers' efforts;
- Possibility of tracking the customers' progress in terms of objectives defined during the customer activation process;
- Time savings for account managers', who currently have to collect, transform and process information to extract relevant insights.

This proposed action will be operationalized through the activation of the profile section available in the Company profile in the CRM, currently not being used. Similar to other measures, integration with the company's internal database management system is required to make available the necessary information about customer behaviour in the platform.

5.3 Expand & Retain Customer process

In order to address the improvement opportunities identified in *chapter 4.3.*, the following proposed actions were developed:

(A4) Development of a pending renovations dashboard

As previously stated, customer retention can be considered as the top priority of the company's account management teams. Given that, it was crucial to develop solutions that allowed account managers to efficiently manage the renovations of every component of their customers' contracts. To fulfil this goal, the development of a pending renovations' dashboard was the solution created. Nevertheless, to be implemented, it requires the following changes in the current CRM system:

- Creation of a new deal pipeline - Retention: by distinguishing deals that are targeted at ensuring the renovation of the contract from those that are targeted at ensuring the expansion of the customer contract through up and cross-selling, account managers will be able to monitor them closely and provide the necessary treatment;
- Automatic generation of alerts to keep in mind the approximation of renewals of all components of the customer contract: given the service start date and contract duration of each component available in the company's database, an additional field in the CRM will automatically determine a retention deal, alerting account managers about the approximation of the event. Then, they ought to initiate the process to ensure the renovation. Once again, integration with the company's internal database management system is required to gather the information available about current contract components.

(A5) Automatic generation of alerts when customers experiment new functionalities/services

This solution aims to assist account managers in the execution of cross-selling strategies, through the automatic detection of a new customer behaviour, alerting managers to that fact. This proposed action will contribute to increase efficiency of cross-selling strategies as they are concentrated on responding to customers' actions, enforcing the customer-centric strategy of the company. Account managers can act in a timely period, supporting customers when they are still testing new functionalities of the product or services, thus increasing the quality of service provided and, consequently, the level of customer satisfaction.

5.4 Additional Considerations

In order to address the generic improvement opportunities identified in *chapter 4.4.*, the following proposed actions were developed:

(A6) Integration with internal database management system (Admin)

The integration of the CRM system with the company's internal database management system can be considered as a generic requirement for the other proposed solutions to be properly implemented as it is where all the information about the actions and interactions of the customers with the platform is stored. Thus, this solution will contribute to:

- Reduce the account managers' manual workload;
- Reduce information inconsistencies and duplication. Additionally, the company's employees do not have to worry about keeping customer-related data synchronized as updates made are visible instantaneously in either systems;
- Generate automatic alerts to inform account managers about new business opportunities based on the real-time customer-related data, leading to increased levels of productivity and allocation of efforts.

(A7) Complete workflows

This proposed action aims to standardize specifications provided to account managers across current and future workflows in the CRM system, namely in terms of language and descriptions. This solution will guarantee that every employee has a clear picture of what needs to be performed at every stage of the process, hence mitigating the existence of doubts and uncertainties.

(A8) Organization of the information available in Company profile

According to Iriana and Buttle (2006), knowledge and information available to first-line employees such as sales representatives and account managers is essential to achieve a sustainable competitive advantage. Given this, organizations have to maintain customer-related data organized and updated to be able to leverage from its use to achieve increased levels of productivity, better customer communication and enhanced customer relationships.

This proposed action will be operationalized through the establishment of the following information categories and elimination of unnecessary data fields, contributing to increase account managers' productivity as they are able to access the information they need more efficiently:

- *Generic data* (Name, Sector, Number of employees, Associated Lead, etc.)
- *Customer Study* containing data collected during the lead phase (CRM used, E-commerce platform used, etc.)
- *Tracking* containing data relevant to the Account (link to Drive folder, last customer review, last contact, technical support tickets, etc.)
- *Contract* containing data about the current contract of the customer (information on services subscribed, duration of contract, start and end dates, etc.)
- *Financial data* containing financial data of the customer (useful for sending correspondence, invoices - section to create letters, etc.)

(A9) Development of a Department Manual

The documentation of account management processes and procedures will contribute to (Ungan, 2006):

- Guarantee the preservation of knowledge and information currently available;
- Detect improvement opportunities as they provide a transparent picture of the processes, enabling process analysts to easily discover problems;
- Train and help new employees understand their job roles and familiarize themselves with the processes they'll be involved in;
- Guide experienced employees as they can refer to these documents when needed;
- Achieve and maintain consistency in terms of service provision;
- Mitigate risks and possible conflicts among employees.

(A10) Introduction of Customer Profitability analysis practices

Nowadays, one of the most acknowledged principles of CRM is the fact that within any given customer base, each customer is a different profit centre, given the revenues it generates and the costs the company has to incur to serve him. According to van Raaij (2005), companies that implement customer profitability analysis (CPA) are able to keep track of the exact profit contribution of customer segments and/or individual customers through the allocation of both revenues and costs to them, following ABC principles. Given this, CPA enables companies to achieve an improved understanding of its sources of profitability, the relationship between customers' characteristics and costs, and the one between the behaviours of employees and costs. Thus, given the scarce nature of resources available for companies to deploy, it leads to better informed decisions regarding the allocation of resources to customers and market sectors, enabling the formulation of differentiated segmentation and targeting strategies (van Raaij, 2005). Nevertheless, the implementation of CPA practices can be viewed as an iterative process, given the constant changes in the company's business context.

In the context of the company under study, the introduction of CPA practices requires the development of a customer profitability model, which implies significant changes, namely in terms of information systems and internal processes as the company does not follow an activity-based costing accounting approach, currently. Given this, the intervention of cross-functional team to understand current active customers, the activities performed by the company to serve them and what drives the costs of these activities is necessary.

(A11) Development of an Issue register workflow

In an effort to keep an organized record of the issues affecting the performance of the account management team and enable the development and implementation of corrective measures in the future, the development of an issue register workflow in the CRM would be highly beneficial. Taking into account the company's growing commitment to processes' dematerialization and the effort to centralize activities and information in the CRM system, this solution facilitates the characterization of each issue through a set of predefined fields, namely their qualitative and quantitative impact for extensive analysis, alerting top management to their existence (Dumas et al., 2018).

(A12) Implementation of a Net Promoter System®, oriented to collecting feedback from customers

Customer feedback is regarded as a key business growth driver, uncovering new product and service development opportunities that are connected to customers' needs and expectations. Following the underlying logic of the satisfaction-profit chain, customer satisfaction levels increase as customer insights enable companies to develop improved customer value propositions and provide better customer experiences. In turn, this leads to increases in customers' intention to repurchase, which influences actual purchasing behaviour, positively impacting the company's business performance (Buttle & Maklan, 2015).

Therefore, the implementation of the Net Promoter System®, developed by Fred Reichheld and top consulting firm Bain & Company, promotes internal learning by sharing customer feedback with employees that have a direct impact in a given customer experience, supporting the continuous improvement of the company. In comparison to other approaches, the main advantages of using system are (Company, 2018b):

- Simplicity of surveys employed, reducing the efforts on the customer side, and consequently increasing participation rates;
- Ease of use, as surveys can be conducted over several channels and are quickly processed;
- Quick follow-up, as customer feedback is rapidly shared with frontline employees, enabling a timely reaction to possible problems or concerns;
- Adaptability, given its applicability to different business settings.

Research has established a positive correlation between a company's Net Promoter Score and its organic growth, highlighting the need of establishing and maintaining high-quality relationships with current customers as a necessary condition, but insufficient to ensure future growth (Company, 2018a).

In the context of the company under study, customer feedback will be collected after selected moments throughout the customers' lifetime with the company, namely transactions and experiences, to understand the impact of such moments on customer loyalty and, consequently define points of improvement. In addition, feedback regarding the relationship between the company and customer will also be collected as it is crucial for account managers to receive input, enabling them to improve selling, product design and servicing. The goal is to keep track of feedback the customer provides throughout its lifetime, through the conduction of NPS surveys. This solution will be operationalized through the development of a feedback collection workflow triggered by the completion of meetings and calls in the CRM system. In addition, given the customer's rating category, an extensive NPS survey will be distributed over regular intervals of time, enabling account managers to monitor overall satisfaction levels.

In summary, *Table 7* details the match between the proposed actions developed and the problems identified in *chapter 4*, demonstrating aspects of account management processes that can be improved and specifically how they can be implemented in the company's context.

Table 7 - Match between solutions developed and improvement opportunities identified

	Problem	Cause	Action
Activate Customer	P1	C1.1.	A1
		C1.2.	
		C1.3	
	P2	C2.1.	A1
	P3	C3.1.	A2
		C3.2.	
	P4	C4.1.	A1
Monitor Customer	P5	C5.1.	A6, A7, A8, A9
		C5.2.	
	P6	C6.1.	A6
	P7	C7.1.	A2
		C7.2.	A2
		C7.3.	A2, A6
		C7.4.	A7, A8, A9, A2
Expand & Retain Customer	P8	C8.1.	A2, A6
		C8.2.	A6, A2
		C8.3.	A6, A4
		C8.4.	A5, A6
Additional Considerations	P9	C9.1.	A7, A8, A9
		C9.2.	
		C9.3.	
	P10	C10.1.	A12
	P11	C11.1.	A2. A10
		C11.2.	A2, A10
		C11.3.	A11

5.5 Cost-Benefit Analysis

After the development of improvement solutions that address the problems encountered, the final step of this phase of the project included the prioritization of such solutions through the execution of a cost-benefit analysis. Often, this natural selection is required in the context of BPM initiatives due to scarcity of resources available to implement all improvement proposals made. Given these constraints, companies prefer to start with solutions that are expected to produce the greatest effects or that for some other reason are preferred. There are several criteria that can be applied to sort solutions (Andersen, 2007).

In the case of the company used as case study, the determining factors considered were:

- *Expected improvement effects*;
- *Difficulty of implementation*, namely in terms of required time of implementation, associated cost and level of collaborative effort needed.

Ideally, solutions are expected to generate increased positive benefits for the company and, simultaneously, not be difficult to implement - do not take long to be implemented, does not have significant costs associated, and does not require the collaboration of many employees, namely from other functional units. However, natural trade-offs may be considered. For

instance, solutions requiring the execution of big projects can significantly impact the company, thus requiring a greater involvement and coordination between employees and more time to be implemented.

Appendix K represents the four-quadrant matrix developed for the project, reflecting the assessment made about each solution proposed.

To further strengthen the cost-benefit analysis conducted, a previous study aimed at identifying fouls in the company's sales team internal processes, provide suggestions to improve and increase usage levels of the CRM system and implement them was taken into consideration (Reis, 2018). In the scope of this project, stakeholders were asked to sort solutions generated according to the degree of importance of including them in the CRM system, simplifying daily tasks and activities, but at the same time, increase the quality of service provided. This assessment established the prioritization for implementation, given the scarce resources available. Solutions implemented during this project mainly addressed the customer acquisition process.

Analysing the solutions that were not implemented, it is possible to conclude that the results of the survey conducted coincide with recent information gathered through the conduction of interviews. At the moment, the development of mechanisms that enable the proactive monitoring of contract renovations, the provision of automated information about customers to improve the accuracy of upsell and cross-selling strategies as well as the inclusion of a customer rating system that dictates the automatic generation of follow-up tasks given the category in which the customer fits are still the most valued improvements by account managers'.

Taking into consideration the assessment made about each solution proposed and results extracted from a previous study conducted, (A2) was selected for implementation given the expected impact it will have on the overall group of account management processes, despite the increased difficulty of implementation.

6 Implementation and Evaluation of Results

After ranking improvement proposals based on criteria previously presented, this chapter is dedicated to the final phase of the project in which process implementation and monitoring are outlined, addressing *RQ4*.

Given the complexity and potential impact of the solution selected for implementation in the context of the project, in addition to the internal resources currently available, the implementation phase is still taking place at the E-goi. *Appendix L* contains a Gantt diagram detailing the project's schedule.

The following subchapters will go into detail on the system developed, the information that needs to be integrated, the data fields needed and the workflows that need to be developed to allow the automation of tasks. Additionally, performance metrics are defined to assess the success of the implementation after its completion.

6.1 Overview on the customer categorization system developed

As previously referred in chapter 5.1., the motivation to develop this system resides on the acknowledgement that it is not profitable for the company to have each account manager providing the same service level across his/her portfolio, given their different needs, preferences and expectations, in addition to their disparate profit contribution to the company (Buttle & Maklan, 2015). Thus, this system guides internal resource allocation by enabling the prioritization of customers and the adaptation of customer management strategies deployed throughout their lifetime with the company based on the continuous analysis and processing of customer-related data, taking advantage of the company's core asset: its database. This system overcomes the problems identified in chapter 4 by transforming a one-off manual assessment that was previously solely based on judgmental and subjective factors, varying from account manager considered, into a potent tool for strategic planning and successful relationship management, boosting business performance. The basis of the system is a customer portfolio model that clusters customers into categories according to the final score obtained. Given each category, tailored customer management strategies are applied through automated workflows and mechanisms.

Literature available about customer portfolio management revealed a heterogeneous group of models with notable differences in terms of methods and data used. Nevertheless, the implementation of a portfolio model ought to take into consideration the company's business internal and external business context, due to their sensitivity to measurement and definition (Terho, 2008). Therefore, given the difficulty in matching the business specificities of E-goi with the dimensions of analysis customer portfolio models reviewed use, it was decided to develop a tailored model.

Focusing on the analytical perspective of the model, interviews and workshops with process participants uncovered the need of considering three main dimensions when computing a given customer's score. The first two dimensions are oriented towards a fundamental element of portfolio analysis - the profitability of relationships -, similar to models available in literature.

Contractualized Profitability, reflects the initial profit contribution margin the customer is expected provide the company over a given time period. It can be obtained through the formula: *Contract Value - Costs of products/services sold*.

Real Profitability, reflects the profit contribution margin the customer actually provides the company over a given time period. It can be obtained through the formula: *Contract Value - Costs of products/services consumed*. This second dimension is closely related to the company's business reality, as customers can purchase subscription plans based on their database size or on the number of messages they intend on sending. Naturally, depending on their own marketing strategies, customers can make more or less use of the products and services purchased, which translates into differences between the contractualized profitability and the real profitability, impacting the company's business performance. Thus, this dimension can assume positive, negative or null values.

After applying the formulas previously presented, a classification, varying from 0 to 5, is attributed to both profitability values according to the interval in which they fit. The definition of profitability intervals will be based on the analysis of current active customers and their respective profitability values.

Despite providing a reliable foundation for strategic decision-making, namely in terms of pricing, service level agreements and discounts, solely looking to the financial implications of maintaining relationships with customers when classifying them would be misleading in the context of the company under study. The strong-future oriented nature of key account management must be taken into consideration when classifying customers as the goal of the company is to develop strong mutually beneficial long-term relationships with its customers. Therefore, the third dimension, *Future Business Potential*, reflects the potential for growing the value of a given customer. This may be achieved by account managers through cross-sell and/or up-sell activities. In this sense, this dimension is composite, taking the two facets into account as follows:

- *Set of products/services to be sold in the future*: Given the customer's goals and business specificities, account managers select the products/services that are most suitable to grow the customer's share-of-wallet. Each category has an average value associated, which results in a total potential amount that can be achieved through cross-selling. Account managers will have to manually update this variable every six months to ensure the accuracy of customer assessment;
- *Potential to increase consumption*: Real-time information regarding the consumption of products/services purchased by the customer (e.g. number of deliveries made, utilization rate of plan subscribed, etc.) and its comparison to the expected consumption will be used to assess the potential of selling superior products/services. In addition, this contrast will serve as basis for the generation of an automatic alert to account managers if a significant variation between the estimated consumption and the real one is detected.

As a result, a given customer's score is obtained through the formula:

$$Customer\ Score = a * CP + b * BP + c * RP, \forall\ a,b,c\ \in [0;1] \wedge a + b + c = 1$$

CP: Contractualized Profitability

BP: Future Business Potential

RP: Real Profitability

The application of the model will occur in two separate moments of the customers' lifetime with the company, bearing in mind their differences in terms of scope and activities that account managers must accomplish in each phase of relationship.

The first application will take place when the account manager acquires the customer, i.e., when the deal is won, substituting the business potential assessment currently conducted during the process *activate customer*. At this point, the customer is still taking not advantage of products/services purchased, therefore the dimension *Real Profitability* is not yet possible to compute, assuming a null value.

From that moment on, the second application will occur on a regular monthly basis, serving as foundation for the process of monitoring customer, to ensure that account managers are capable of adapting strategies given their customers' behaviour, detect potential problems and provide the support necessary in a timely period. Therefore, the dimension weights *a*, *b* and *c* will vary according to the moment of application, resulting in distinctive versions of the model. They reflect the degree of importance of each particular dimension for the assessment of customers and, consequent guide internal resource allocation. Account managers' experience and empirical know-how, in addition to a benchmarking study of the company's corporate customers served as basis for the definition of dimension weights that reflect the business reality of the company and will lead to a rigorous assessment of customers.

In this sense, the final formula of the model developed is:

$$Customer\ Score = 0{,}4 * CP + 0{,}2 * BP + 0{,}4 * RP$$

Nevertheless, the category attributed to a given customer needs careful consideration from account managers. Despite not providing a significant profit to the company and not evidencing signs of future development, certain customers may be of strategic relevance for E-goi, justifying the internal investment made. There is a multitude of variables, namely the existence of R&D or Marketing synergies and access to new markets and customers, that need to be included in this assessment (Turnbull & Zolkiewski, 2002). To prevent the undervaluation of customers with these characteristics, and consequently the provision of a service level that does not match the company's best interests, account managers will be able to request the revaluation of the score to the team leader through an automated workflow, exposing the reasons why it should happen. Faced with that information, the team leader can accept or decline the request. If accepted, the customer will be moved to the first category, ensuring his continuous support and tracking.

Hence, the company section of the CRM system will function as a dashboard for account managers, where they will be able to consult their customer portfolio according to the categories they belong to.

The categorization system developed can serve as foundation for the development of a vast group of automated workflows and mechanisms. Nevertheless, at this point, the aim is to focus on the automation of customer monitoring tasks given the category in which the customer fits. The definition of four differentiated forms of account management to be applied to each category and their specificities, namely in terms of frequency and mode of contact is still taking place for two reasons. First, top management has to make sure that customers' needs, expectations and requirements are being fulfilled through the service level provided for the category in which they fit and second, the differences between markets and strategies pursued by teams increases the difficulty of defining generic account management modalities that can be applied across the entire company's corporate customer base.

6.2 Modification and adaptation of the CRM system

The implementation a system such as the one previously described involves making changes to the company's current CRM system, including the integration with internal databases to access information that is currently not available and the development of automated workflows, in order to boost its operational facet and guide the allocation of efforts of account managers when performing their daily tasks.

To prepare the integration of both systems the first step was to understand which information needed to be included in the CRM system from the company's internal database management system, so the technical team could analyse both database structures to perform the integration. The diagram in *figure 7* presents the information that needs to be integrated into the CRM system to guarantee the deployment of the system developed.

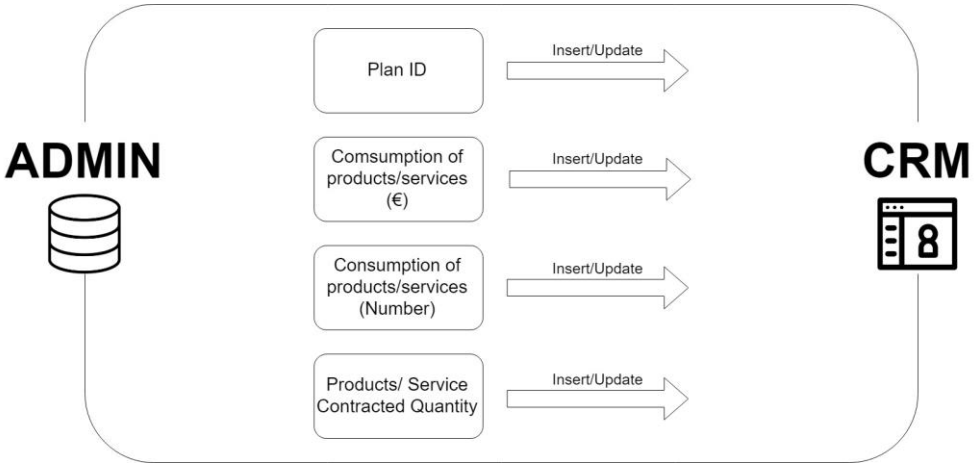


Figure 7 - Data mapping for CRM integration

6.3 Measuring implementation results

Since the implementation phase has not yet been completed at E-goi, the evaluation of results achieved is limited, but the suggestion of metrics for future evaluation can be made. Therefore, this subchapter is dedicated to the proposal of a set of performance metrics that will enable the evaluation of the results obtained with the implementation of the system developed, following the BPM lifecycle approach, presented in *chapter 2*.

Given the extent of changes triggered by the implementation of the customer categorization system, and its expected effect in the company's business performance, quality of service provided, efficiency and speed of account management teams and product/service improvements, the Balanced Scorecard, proposed by Kaplan and Norton in 1992, was the performance measurement tool used to guide the establishment of performance metrics to assess the results achieved with this project due to its completeness, enabling the company's top management to have a complete view of the business through four main perspectives - customer, internal, innovation and learning and financial -, and successful applicability by different organizations (Kaplan & Norton, 1992; Van Looy & Shafagatova, 2016). *Table 8* details the performance metrics defined for each perspective of analysis.

Table 8 - Metrics defined to evaluate the success of the implementation phase

Perspective	**Performance Metrics**
Financial	- Total service costs; - Number of lucrative customers; - Average customer lifetime value;
Customer	- Customer satisfaction; - Average frequency of transactions (by type); - Number of lost customers; - Number of contracts renewed;
Internal	- Quality of service provided; - Reliability of business processes; - Process lead time; - Account managers' productivity;
Innovation and Learning	- Number of new products/services; - Number of product/service improvements - Level of internal satisfaction with CRM.

7 Main Conclusions and Future Research Directions

The main purpose of the research was to study the company's current situation, identify improvement opportunities, develop and implement solutions that addressed the problems identified to ensure its adaption to the dynamic business reality in which it operates. Account management processes were selected as targets of this research due to their impact in the company's business performance and long-term sustainability.

This final chapter of the dissertation is dedicated to the presentation of the conclusions that were drawn during the course of the project, therefore meeting research objectives outlined in the first chapter. There are followed by the description of future research directions.

7.1 Main Conclusions

Research objectives defined in the beginning of the project were satisfactorily achieved through a continuous focus on addressing the research questions initially defined.

The initial phase of this project served as a starting point for the research conducted, providing an extensive knowledge about the company's functioning and how processes are currently carried out. First, the company's current business situation and evolution was analysed, which enabled the delimitation and characterization the company's current business processes using BPM techniques. It was verified that E-goi has achieved significant business growth in recent years through the pursuit of a customer-centric differentiation strategy, focused on the quality of the service provided and continuous development of innovative products and services, aiding customers to achieve their marketing-related goals. Given the vision and mission of the company and the duration of the project, three interconnected processes focused on the management of relationships with E-goi's most significant customer segment - *Corporate* - were chosen as targets for the next phases.

Following a qualitative research approach, the conduction of informal interviews, direct observation, document analysis and automated discovery, enabled the identification of improvement opportunities, namely the root causes of the problems, thereby answering *RQ1* and *RQ2*. The main problems of account management processes derived from the lack of connection between the CRM and the company's internal database management system, which lead to late interventions on account managers' behalf given customers' behaviours. In addition, account managers' efforts and resources were not being efficiently allocated to customers and revenues/costs of each relationship were not being accounted, undermining the company's performance.

After identifying and characterizing improvement opportunities, the next phase of the project focused on the formulation and prioritization of possible solutions to correct or mitigate the problems encountered through the conduction of additional interviews and workshops with process participants, thus answering *RQ3* and *RQ4*. Measures defined demonstrate ways through which current account management processes can be improved and specifically how they can be implemented in the context of the company, surpassing existing problems.

The development of a cost-benefit analysis of solutions generated, the consideration of a previous study conducted about the company's sales' team internal processes and top management's assessment motivated the selection of the solution focused on the development of a customer categorization system that dictates the automatic generation of follow-up tasks

given the category in which the customer fits to be implemented in the course of this project due to its cross-cutting nature and potential impact in the company's strategy and performance. The system developed allows the company to improve the way account managers relate to their customers, ensuring that the internal investment made in terms of resources and efforts is adjusted to the customers' worth for the company, through the provision of an adequate service level and deployment of specific customer management strategies. Therefore, the basis of the system developed is a customer portfolio model, whose results trigger CRM automated workflows. Given the specificities and context of the company's business and customer portfolio models available in literature, a tailored model was developed to ensure the consideration of the dimensions that led to reliable results for the company's objectives.

Even though implementation was initiated at E-goi, it is still not possible to conclude about the success of last phase of the project, since the process has not been concluded. Therefore, performance metrics were defined to assess the success of the implementation phase, thus meeting the final research objective of this dissertation. Due to the nature and expected impact of the solution, the Balanced Scorecard was the performance measurement tool used to formulate performance criteria.

The involvement of process participants and other stakeholders throughout the course of the project was crucial for a thorough qualitative investigation, generation of improvement actions and implementation of the solution selected.

In conclusion, this dissertation aims to serve as starting point for future change projects to be carried out in the company, following a continuous improvement approach.

7.2 Future Research Directions

Given the short period in which the project was carried out and internal resources available, the majority of improvement solutions proposed were not implemented. Therefore, research conducted throughout the course of this project can serve as basis for future internal projects to further increase the efficiency and productivity of account management teams. Nevertheless, some of the solutions proposed were developed with a long-term perspective in mind, thus requiring the passage of time to start producing results.

Similarly, results regarding the success of the implementation phase were not collected. In this sense, future research directions may focus on understanding the results achieved and initiate new business process improvement projects, if necessary. Furthermore, a second analysis and documentation of the business processes affected by the solution implemented can enhance the outputs of the current project.

Given the absence of a previous study on this topic, this project has provided the company with a significant body of knowledge and documentation that ought to be preserved to be able to serve as starting point for future research purposes. Hence, the establishment of an internal BPM group to foster, manage and prioritize business process improvement projects may help the company maintain this process-oriented culture initiated with this project.

One of the most critical phases of the implementation process of the improvement solution selected is related to the provision of adequate training to account managers. The success of implementation is only possible if account managers understand and accept the changes that are being implemented and have the opportunity to contest them and suggest alternatives.

Therefore, training must be provided through a continuous learning experience, and not just through a series of workshops that are carried out in the beginning of the process.

The customer portfolio model developed as basis of the system being implemented only incorporated the costs of products/services to compute both the real and contractualized profitability. Given the relationship nature of key account management, service costs, namely customer support, training and representation expenses, need to be included in this assessment to enhance the reliability and reality of the categorization made. Therefore, future research developed can focus on improving the model through the inclusion of additional types of costs and study the differences of results achieved.

Finally, and more importantly, this dissertation followed a qualitative research approach due to the absence of data, which limited the quantification of causes. Therefore, future research directions include the development of a project with the aim of enriching and complementing the analysis carried out using a quantitative research approach.

References

Andersen, B. (2007). *Business Process Improvement Toolbox*: ASQ Quality Press.

Azevedo, A. (2017). *BPM Notes*. FEUP.

Babakus, E., Cravens, D. W., Grant, K., Ingram, T. N., & LaForge, R. W. (1996). Investigating the relationships among sales, management control, sales territory design, salesperson performance, and sales organization effectiveness. *International Journal of Research in Marketing, 13*(4), 345-363. doi:https://doi.org/10.1016/S0167-8116(96)00016-X

Bose, R. (2002). Customer relationship management: key components for IT success. *Industrial Management & Data Systems, 102*(2), 89-97. doi:doi:10.1108/02635570210419636

Buttle, F., & Maklan, S. (2015). *Customer Relationship Management: Concepts and Technologies*.

C. Anderson, J., C. Jam, D., & Chintagunta, P. (1993). *Customer Value Assessment in Business Markets: A State-of-Practice Study*.

Chen, I. J., & Popovich, K. (2003). Understanding customer relationship management (CRM): People, process and technology. *Business Process Management Journal, 9*(5), 672-688. doi:10.1108/14637150310496758

Company, B. (2018a). How the Net Promoter Score Relates to Growth. Retrieved from http://www.netpromotersystem.com/about/how-is-nps-related-to-growth.aspx

Company, B. (2018b). What are the benefits of Net Promoter in comparison to other customer measurements? Retrieved from http://www.netpromotersystem.com/about/benefits-of-net-promoter.aspx

Davenport, T. H. (1993). *Process Innovation: Reengineering Work Through Information Technology*: Harvard Business Review Press.

Dumas, M., La Rosa, M., Mendling, J., & Reijers, H. (2018). *Fundamentals of Business Process Management* (2 ed.): Springer-Verlag Berlin Heidelberg.

Faria, J. A. (2017). *BPM Notes*.

Fiocca, R. (1982). Account portfolio analysis for strategy development. *Industrial Marketing Management, 11*(1), 53-62. doi:https://doi.org/10.1016/0019-8501(82)90034-7

Frow, P., & Payne, A. (2009). *Customer Relationship Management: A Strategic Perspective* (Vol. 3).

Hammer, M. (1990). Reengineering work: don't automate, obliterate. *Harvard business review, 68*(4), 104-112.

Harmon, P. (2007). *Business Process Change: A Guide for Business Managers and BPM and Six Sigma Professionals*: Elsevier/Morgan Kaufmann Publishers.

HubSpot. (2018a). Cross-Selling and Upselling: The Ultimate Guide. Retrieved from https://blog.hubspot.com/service/cross-selling

HubSpot. (2018b). The Ultimate Guide to Customer Onboarding. Retrieved from https://blog.hubspot.com/service/customer-onboarding

HubSpot. (2019). Key Account Management: The Ultimate Guide. Retrieved from https://blog.hubspot.com/sales/key-account-management

Iriana, R., & Buttle, F. (2006). *Strategic, Operational, and Analytical Customer Relationship Management* (Vol. 5).

Ivens, B. S., Leischnig, A., Pardo, C., & Niersbach, B. (2018). Key account management as a firm capability. *Industrial Marketing Management, 74*, 39-49. doi:https://doi.org/10.1016/j.indmarman.2017.09.026

Jacka, J. M., & Keller, P. J. (2009). *Business Process Mapping: Improving Customer Satisfaction*: Wiley.

Johnson, G., Scholes, K., & Whittington, R. (2008). *Exploring Corporate Strategy*: Financial Times Prentice Hall.

Kotler, P., & Armstrong, G. (2008). *Principles of Marketing*: Pearson/Prentice Hall.

Kueng, P. (1999). *Building a Process Performance Measurement System: Some Early Experiences* (Vol. 58).

Mosadeghrad, A., & Ansarian, M. (2014). *Why do organisational change programmes fail?* (Vol. 5).

Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers*: John Wiley & Sons.

Payne, A. (2006). *Handbook of CRM: Achieving Excellence in Customer Management*: Elsevier Butterworth-Heinemann.

Philipson, S., & Zineldin, M. (2007). Kotler and Borden are not dead: myth of relationship marketing and truth of the 4Ps. *Journal of Consumer Marketing, 24*(4), 229-241. doi:10.1108/07363760710756011

Porter, M. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*: Free Press.

Rababah, K., Haslina, H., & Ibrahim, H. (2011). *Customer Relationship Management (CRM) Processes from Theory to Practice: The Pre-implementation Plan of CRM System* (Vol. 1).

Ramias, A., & Wilkins, C. (2010a). Building Metrics for a Process. Retrieved from BP Trends website: https://www.bptrends.com/bpt/wp-content/publicationfiles/SEVEN%20-COL-Performance%20Improvement-Building%20Metrics%20for%20a%20Process%20-Ramias-Wilkins-v2-final.pdf

Ramias, A., & Wilkins, C. (2010b). Measuring Process Performance. Retrieved from BP Trends website: https://www.bptrends.com/bpt/wp-content/publicationfiles/ONE-05-10-COL-Performance%20Improvement-%20Measuring%20Process%20Performance%20-Ramias-Wilkins%20v31.pdf

Reis, J. F. (2018). *Implementação de um sistema de CRM para otimização de processos internos.* (Master), FEUP, Porto.

Ryals, L., & Knox, S. (2001). *Cross-functional issues in the implementation of relationship marketing through customer relationship management* (Vol. 19).

Serrat, O. (2017). The Five Whys Technique. In *Knowledge Solutions: Tools, Methods, and Approaches to Drive Organizational Performance* (pp. 307-310). Singapore: Springer Singapore.

Sharp, A., & McDermott, P. (2009). *Workflow Modeling: Tools for Process Improvement and Applications Development*: Artech House.

Sheth, J., & Parvatiyar, A. (1995). *The Evolution of Relationship Marketing* (Vol. 4).

Storbacka, K. (1997). *Segmentation Based on Customer Profitability—A Retrospective Analysis of Retail Bank Customer Bases* (Vol. 13).

Tamošiūniene, R., & Jasilioniene, R. (2007). Customer relationship management as business strategy appliance: Theoretical and practical dimensions. *Journal of Business Economics and Management, 8*(1), 69-78. doi:10.1080/16111699.2007.9636154

Terho, H. (2008). *Customer Portfolio Management – The Construct and Performance.*

Trends, B. (2013a). Business Process. Retrieved from https://www.bptrends.com/resources/glossary/business-process/

Trends, B. (2013b). Business Process Management (BPM). Retrieved from https://www.bptrends.com/resources/glossary/business-process-management-bpm/

Turnbull, P., & Zolkiewski, J. (2002). Do relationship portfolios and networks provide the key to successful relationship management? *Journal of Business & Industrial Marketing, 17*(7), 575-597. doi:10.1108/08858620210451109

Ungan, M. (2006). Towards a better understanding of process documentation. *The TQM Magazine, 18*(4), 400-409. doi:10.1108/09544780610671066

Van Looy, A., & Shafagatova, A. (2016). *Business process performance measurement: a structured literature review of indicators, measures and metrics* (Vol. 5).

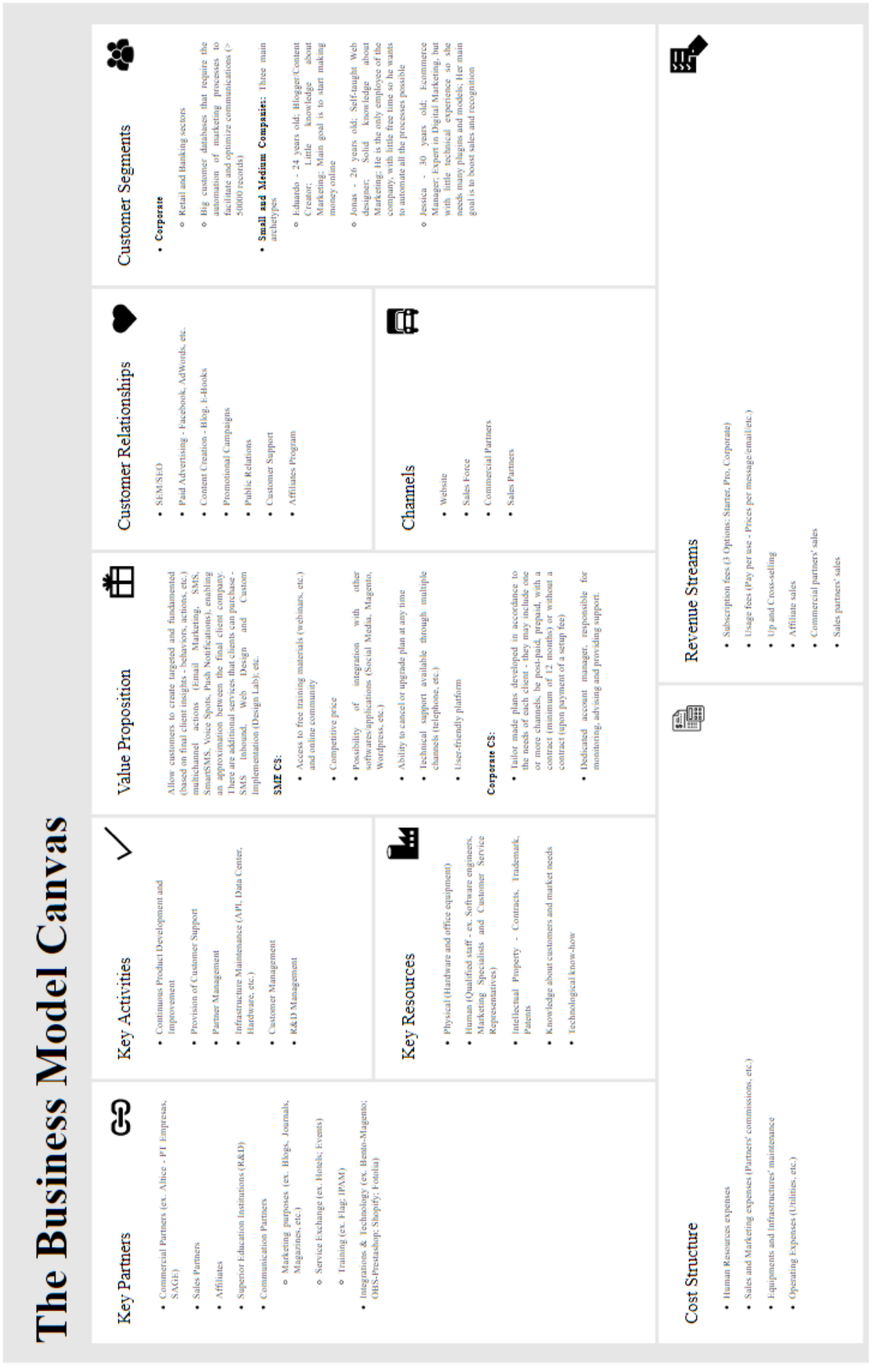
van Raaij, E. M. (2005). The strategic value of customer profitability analysis. *Marketing Intelligence & Planning, 23*(4), 372-381. doi:10.1108/02634500510603474

Walter, A., Ritter, T., & Gemuenden, H. (2001). *Value Creation in Buyer–Seller Relationships: Theoretical Considerations and Empirical Results from a Supplier's Perspective*.

APPENDIX A: Customer Portfolio Models reviewed

Year	Authors	Number of steps	Analytical Perspective	Managerial Implications
1982	Fiocca	2	Step 1 (General): difficulty in managing the account, strategic importance of the account; Step 2 (Key Account): customer's business attractiveness, relative buyer/seller relationship	*General level:* Understand customer structure general level; *Key Accounts:* Improve/ hold/ withdraw position with a customer
1983	Campbell and Cunningham	3	Step 1: life cycle classification of customer relationships (e.g. sales volume, use of strategic resources, profitability of customer to supplier, age of relationship, etc.); Step 2: customer analysis by market segment (e.g. customer's share of its market, etc.); Step 3: portfolio analysis of key customers (e.g. competitive position, growth rate of customer's market)	*Short-term:* Guide resource allocation among customers; *Long-term: U*nderstand and develop customer portfolio structure
1987	Shapiro *et al.*	1	Net price; Cost to serve (presale costs, production costs, distribution costs and post-sale service costs)	Adjust marketing strategies according to the value of different customer groups; Understand and develop customer profitability structure
1997	Turnbull and Zolkiewski	1	Cost to serve; Net price; Relationship Value	Adjust customer strategies to customer costs; Understand customer portfolio structure
1997	Storbacka	1	Relationship revenue; Relationship cost; Volume; Relationship volume; Relationship profitability	Adjust customer strategies to customer costs/profitability; Understand and develop customer profitability structure
2002; 2003	Zolkiewski and Turnbull	1	Customer profitability; Relationship value; Strategic importance of the account; Customer portfolios	Adjust relationship management strategies to customer value; Plan customer portfolio development

APPENDIX B: Business Model Canvas



APPENDIX D: SWOT Analysis

SWOT

Strengths

- **Order Winners**:
  - Level of personalization of the solution and service provided
  - Multichannel integration
  - Competitive price
  - High level of commercial and technical support service
- **Customer Intimacy**: High satisfaction and proximity to customers allows the detection and development of new ideas and solutions;
- **Corporate Culture**: Young and dynamic team based on a strong entrepreneurial spirit and innovation;
- **Know-how**: Technological skills for product development and market knowledge;
- **Product Characteristics**: Flexibility of the product allowing adaptation to different markets.

Weaknesses

- **Business Process Orientation**: Lack of previous business process documentation and analysis projects
- **Internationalization**:
  - Lack of international offices
  - Low notoriety in foreign markets
- **Company Characteristics**: Reduced dimension in relation to competition

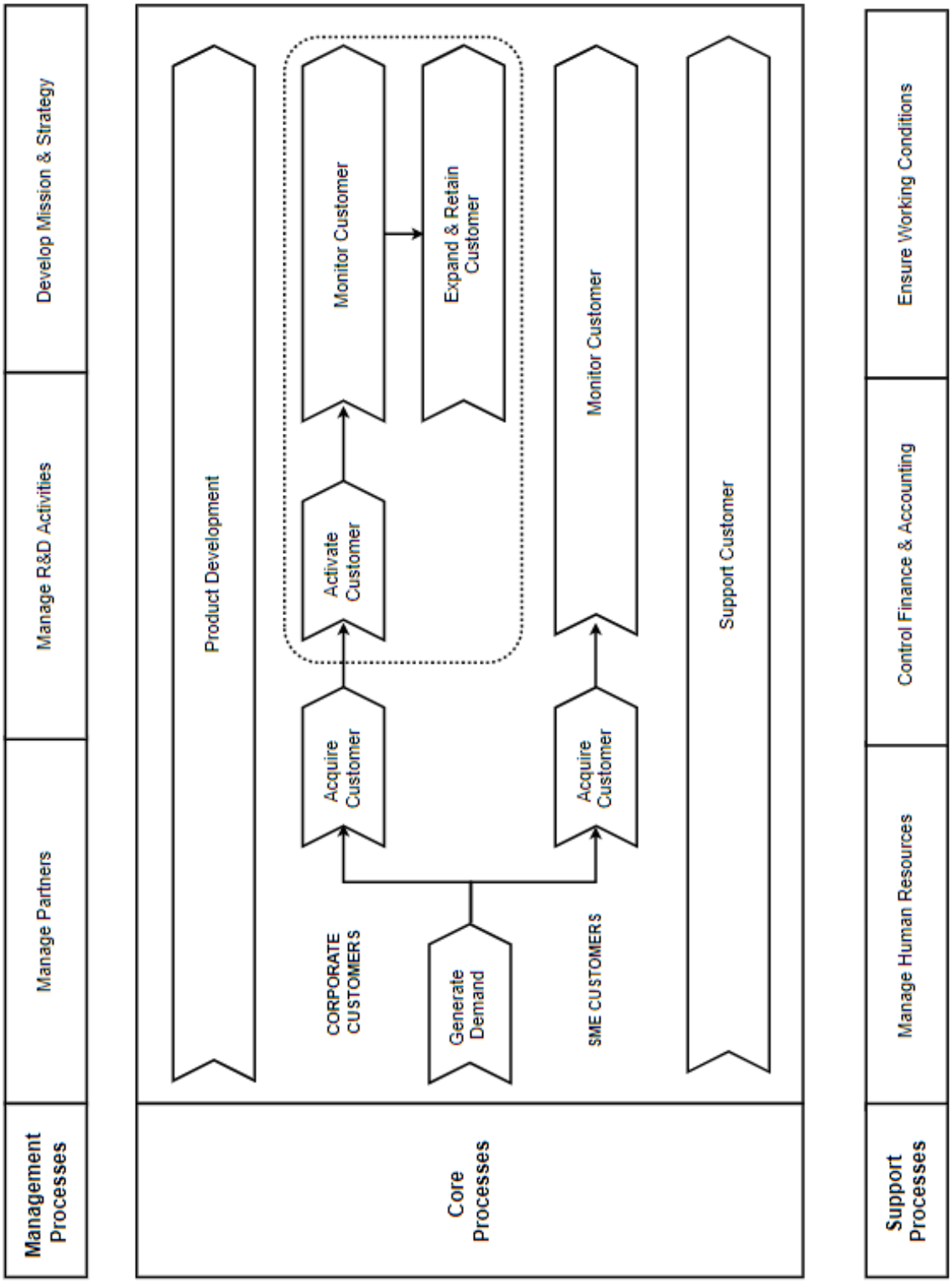
Opportunities

- **Changes in demand**:
  - Increasing demand for SaaS solutions
  - Increasing trend towards the transfer of advertising investments in traditional media to digital media
- **Internationalization**:
  - Possibility to expand to new markets/countries
  - There is still no brand with top of mind notoriety in developing markets for this type of products;
- **Facilities**: Office expansion;
- **R&D**: Development of partnerships with Superior Education Institutions for research synergies;
- **Partnerships**: Potential to develop new alliances with strategic partners.

Threats

- **Technology needs**: Customers are demanding more sophisticated solutions featuring emerging technologies like AI and Deep Learning
- **Market Nature**:
  - Domestic market is limited
  - Highly competitive environment with the possibility of entry of new players in the market
- **Commercial Risk**: Currency fluctuations in important markets (Latin America) can generate losses
- **Human Resources**: Potential scarcity and availability of highly specialized human resources in the north of the country

APPENDIX E: Process Architecture



APPENDIX F: Process Factsheets

Process Name	Generate Demand
Application Scope	Business Development
Purpose	Generate awareness, interest and desire in the organization's products/services; Trigger the action of customers
Trigger	Need of driving the awareness and interest of target customers with the purpose of generating revenue
Inputs	Knowledge about customers, markets, competitors, product
Result	Generation of visitors to the company's online channels
Outputs	Greater marketing efficiency and productivity; Higher levels of customer engagement and responsiveness
Main Phases	- Set demand generation goals - Identify Customer Personas - Develop Message Plan - Create a Content Calendar - Develop Distribution plan - Process results and feedback
Main Responsible	Sales SME team
Performance Criteria	- Customer Lifetime Value - Customer Acquisition Costs (per channel) - Website Traffic (Page views, etc.) - Organic Traffic - Social Media Traffic (Reach and engagement) - Email Marketing Performance (Delivery rate, etc.) - Blog Traffic (Visits per post, etc.) - Social Sentiment

Process Name	Acquire Customer (SME)
Application Scope	SME customers
Purpose	Acquire a new SME customer; Subscription of a paid plan
Trigger	Deployment of the demand generation strategies
Inputs	Visitors to the company's online channels
Result	New SME account (Starter or Pro)
Outputs	New SME account (Starter or Pro)
Main Phases	- Collect Lead - Contact Lead - Convert Tester
Main Responsible	Customer Support Team
Performance Criteria	- Average daily sales volume (monthly based) - Average daily number of new paying customers (monthly based) - Average daily number of new former paying customers (monthly based) - New paying customers balance - Average monthly churn rate - Average monthly number of new accounts - *Click 2 Lead* rate - Distribution of accounts based on the usage level

Process Name	Acquire Customer (Corporate)
Application Scope	Corporate customers
Purpose	Acquire a new Corporate customer
Trigger	Deployment of the demand generation strategies
Inputs	Visitors to the company's online channels; Contacts about a prospect customer
Result	New Corporate account; Company attributed to Account Manager
Outputs	New Corporate account; Company attributed to Account Manager
Main Phases	- Collect Lead - Contact Lead - Negotiate and close deal
Main Responsible	Sales Corporate team (Sales Manager)
Performance Criteria	- Sales Funnel Results - Raising new customers pipeline (number of new leads, contracted deals, new company registrations) - Number of bespoke projects sold

Process Name	Activate Customer
Application Scope	Corporate customers
Purpose	Monitor and train users as they initiate their journey as a customer of the company. This is an important experience that can determine the course of the ongoing relationship your customer has with the product/service.
Trigger	Company attributed to Account Manager
Inputs	Company attributed to Account Manager
Result	Customer's business potential assessed; Communication plan deployed; Customer educated and ready to use the platform
Outputs	Customer's business potential assessed; Communication plan deployed; Customer educated and ready to use the platform
Main Phases	- Briefing with Sales Manager - Basic configurations - Kick off - Advanced configurations - Monitor and support first conversion - Account planning
Main Responsible	Sales Corporate team (Account Manager)
Performance Criteria	- Results from the customers' first actions

Process Name	Expand & Retain Customer
Application Scope	Corporate customers
Purpose	After becoming regular users of the product/service, customers may need to purchase additional features/services, expanding the initial plan they had contracted (through up-selling and/or cross-selling); Ensure that the customer continues paying for, and using, the service, when the initial contracted use period is reaching the end.
Trigger	Plan limit reached/ Check customer account/ Contact with the customer/ Customer renovation date approximation
Inputs	Plan limit reached/ Check customer account/ Contact with the customer/ Customer renovation date approximation
Result	Customer value increase; Customer remains with the company
Outputs	Customer value increase; Customer remains with the company
Main Phases	- Initiate sales cycle - Gather information - Present proposal - Gather feedback - End sales cycle
Main Responsible	Sales Corporate team (Account Manager)
Performance Criteria	- Sales Funnel - Retention & Loyalty Pipeline (number of new leads, deals won and lost) - Number of bespoke projects sold - Number of renovations - Customer churn rate

Process Name	Support Customer
Application Scope	Customers (potential or effective) of the organization
Purpose	Clarify and help customers regarding every aspect of the product/service (technical characteristics, functionalities, prices, etc.) and digital marketing itself
Trigger	Customer contacts organization to report a problem or ask a question
Inputs	Request for support issued; Request for contact issued; Email sent to the Account; Phone Call; Customer initiates conversation in LiveChat
Result	Satisfied customer
Outputs	Ticket resolved
Main Phases	*Support via Tickets* - Assign and prioritize ticket - Process ticket - Transfer and reply ticket *Support via Phone Call* [Customer ID appears on the display] - Answer phone - Open Client account - Answer doubts / problems [Customer ID does not appear on the display] - Answer phone - Identify Contact - Open Client account - Answer doubts / problems - Update customer history *Support via LiveChat (Platform)* - Assign chat

	- Process chat - Answer doubts / problems - Close Chat
Main Responsible	Customer Support team (SAC)
Performance Criteria	- Average first response time (per agent/mean of contact) - Percentage of requests resolved within the agreed SLA (per type of customer/mean of contact) - Customer satisfaction score/feedback - Number of support tickets - Resolution rate - Net Promoter Score (NPS)

Process Name	Manage Human Resources
Application Scope	Employees of the organization
Purpose	Potentiate the employees' performance to achieve the organization's strategic goals
Trigger	Need of managing and developing the employees of the organization
Inputs	Job applications received; Referrals
Result	Greater involvement and performance of the employees
Outputs	Career progression plan; Training plan; Benefits and compensation plans
Main Phases	- Develop HR strategy - Recruit and select - Onboard - Develop and train - Review and plan performance - Reward and retain - Process terminations - Manage information and communication
Main Responsible	Accounting & HR team
Performance Criteria	- Number of employees hired - Employees' satisfaction index - Employees' performance evaluation classification - Employees' satisfaction with training

Process Name	Ensure Working Conditions
Application Scope	Company Management
Purpose	Maintain IT infrastructure updated to keep up with the requirements of the business, as well as equipments and materials in the company's premises
Trigger	Need of maintaining the IT infrastructure updated to keep up with the requirements of the business, as well as equipments and materials in the company's premises.
Inputs	Request for technical support; Request for internal materials issued
Result	Company's infrastructure and equipments are maintained in good conditions and updated when needed
Outputs	Request for technical support/internal materials terminated
Main Phases	- Select and acquire materials and products - hardware, software, etc. - Install, configure, control and maintain materials and products - Manage and maintain physical infrastructure (data centers, etc.) - Provide internal technical support
Main Responsible	IT & Infrastructure Management team
Performance Criteria (KPIs)	- Number of technical support requests resolved - Number of internal requisitions received - Data center capacity consumed

Process Name	Product Development
Application Scope	Product (E-goi platform)
Purpose	Product development and improvement
Trigger	Need for product improvement and development
Inputs	Issue opened on Jira (bug, new feature, improvement, task, suggestion, design)
Result	Product updated
Outputs	New version of the product released
Main Phases	- Process issue - Resolve issue - Review issue - Deploy issue
Main Responsible	Product Development team
Performance Criteria	- Number of issues processed - Issue resolution result (fixed, done, duplicate, cannot reproduce, won't do, won't fix)

Process Name	Manage Partners
Application Scope	Business Development
Purpose	Select viable partners for the development of the firm; Maintain or discontinue partnerships depending on value for company; Support and train partners to potentiate the achievement of results
Trigger	Need of establishing partnerships to benefit from long-term, predictable levels of customers (new distribution channels) and marketing synergies
Inputs	Need of establishing partnerships to benefit from long-term, predictable levels of customers (new distribution channels) and marketing synergies
Result	Access to customers and marketing assets
Outputs	Access to customers and marketing assets

Main Phases	- Commercial Partners
	  - Define ideal partner profile
	  - Scout potential partners
	  - Define partnership details
	  - Close agreement
	  - Onboard partner
	  - Provide training and certifications
	  - Provide support
	  - Evaluate partnership (partner's satisfaction, results produced, impact, etc.)
	  - Collect and process feedback
	
	- Communication Partners
	  - Define ideal partner profile
	  - Scout potential partners
	  - Define partnership details
	  - Close agreement
	  - Evaluate partnership (partner's satisfaction, results produced, impact, etc.)

	- Collect and process feedback
	
	- Affiliates & Sales Partners
	  - Onboard partner
	  - Provide training and certifications
	  - Provide support
	  - Evaluate partnership (affiliate's satisfaction, results produced, impact, etc.)
	  - Collect and process feedback

Main Responsible	Sales SME team/ Sales Corporate team
Performance Criteria	- Number of partners (per type/year/etc.) - Revenue through partners - Number of leads and deals obtained through partners - Partners satisfaction index' - Partner churn rate (per type/year/etc.)

Process Name	Manage R&D Activities
Application Scope	Company Management
Purpose	To meet the demands of customers' and the business itself, the company needs to pursue R&D activities to develop innovative products and projects to support organizational improvements to increase productivity
Trigger	Need of pursuing R&D activities to develop innovative products and projects to support organizational improvements
Inputs	Need of pursuing R&D activities to develop innovative products and projects to support organizational improvements
Result	Deploy and monitor projects with impact for the company
Outputs	Deploy and monitor projects with impact for the company
Main Phases	- Understand market needs and trends - Understand capabilities and goals of the company - Develop an innovation plan - Prioritize projects - Gather and manage innovation resources (funding, human resources, etc.) - Monitor project progress - Manage intellectual property
Main Responsible	R&D team
Performance Criteria	- Funding obtained - Number of applications made for R&D incentives' programs and results achieved - Number of active agreements with Superior Education Institutions

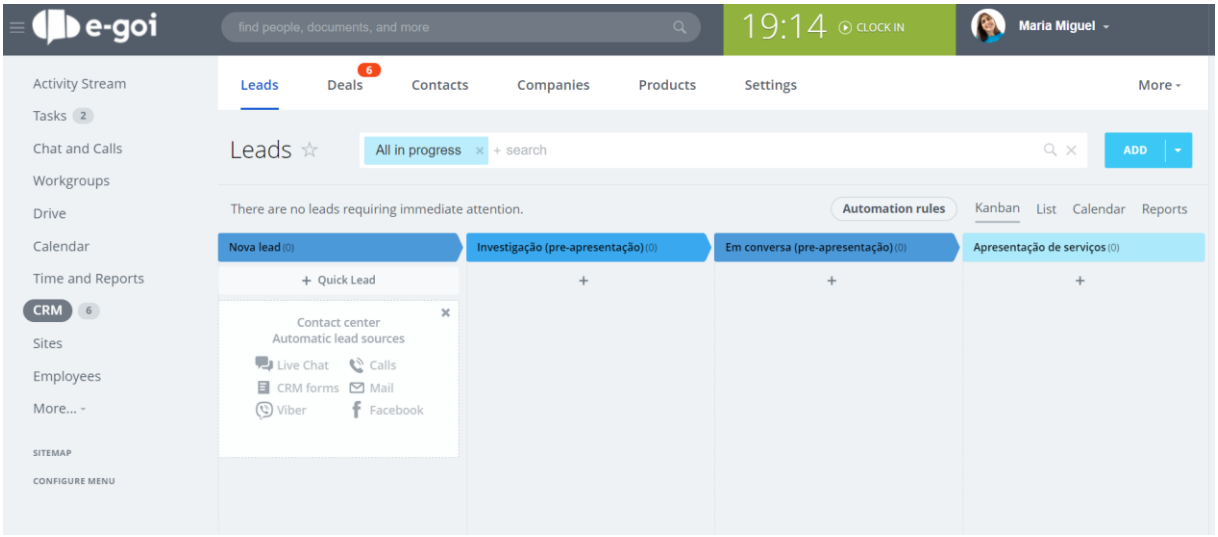
Process Name	Control Finance and Accounting
Application Scope	Company Management
Purpose	Guarantee the financial sustainability of the company through the monitorization of costs, revenues, cash flows and investments
Trigger	Need of guaranteeing the financial sustainability of the company through the monitorization of costs, revenues, cash flows and investments
Inputs	Internal requisitions; Attendance records; Sales Commissions; Invoices; Employee information; etc.
Result	Compliance with the law and regulations; Validity and accuracy of financial statements
Outputs	Tax returns; Insurance records; Financial statements; etc.
Main Phases	- Billing - Process payroll - Manage taxes and compliance - Prepare and analyze financial reports - Manage vendors - Manage treasury
Main Responsible	Administrative & Finance team
Performance Criteria	- Profit evolution

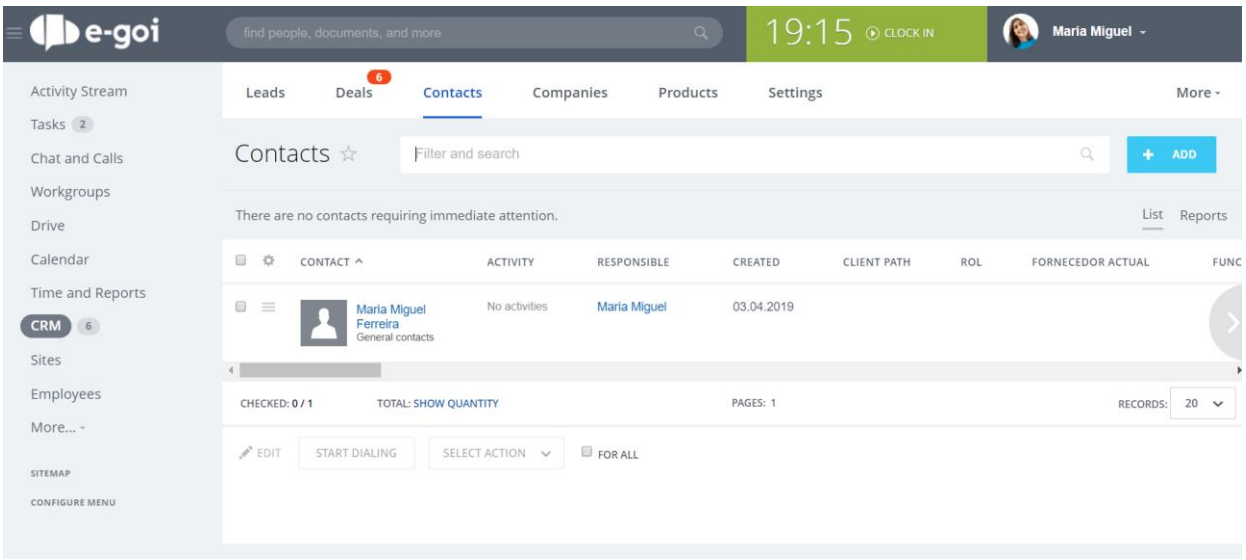
Process Name	Develop Mission & Strategy
Application Scope	Business and Company Development
Purpose	Plan and monitor the implementation of strategic actions for business and company development
Trigger	Need of understanding the strategic position of the company, develop response actions and manage strategy in action
Inputs	Knowledge about customers, markets, competitors, product
Result	Company is able to move in the desired direction
Outputs	Updated business concept and strategic objectives
Main Phases	- Assess the external and internal environment - Process customer feedback - Understand customer needs and wants - Establish and communicate strategic vision - Develop/Update business strategy - Implement and measure strategic initiatives
Main Responsible	CEO
Performance Criteria	- Billing volume - Number of customers (per market/type) - Sales Funnel Results (number of new Leads, Contracted Deals, new Company registrations) - Number of bespoke projects sold - Number of customers lost - Number of new paying customers - Distribution of accounts based on the usage level - Customer churn rate

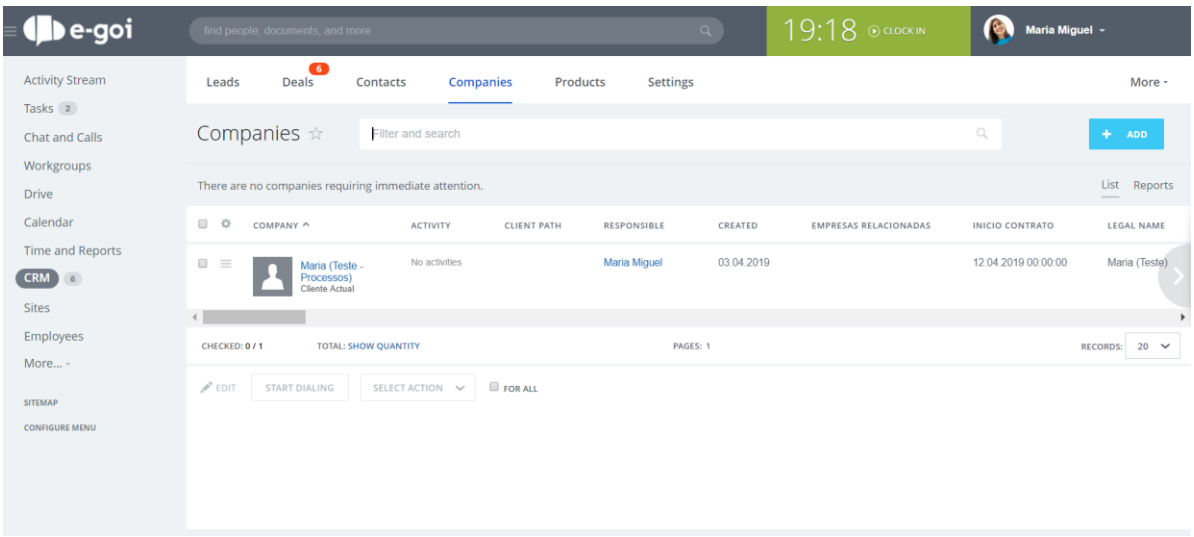
Process Name	Monitor Customer - SME
Application Scope	SME customers
Purpose	Ensure that customers' needs and expectations are met by the company. Assess satisfaction and determine improvements; Ensure that the customer continues paying for, and using, the service, in the long term. Incentivize customers to expand the initial plan contracted.
Trigger	Ticket opened on LiveAgent
Inputs	Ticket opened on LiveAgent
Result	Customer remains with the company and is satisfied with the service and product
Outputs	Ticket resolved on LiveAgent; Feedback about the product and service provided
Main Phases	[STARTER Account] - Monitor renewals (First three months, 6 and 12 months) - Monitor pending movements [PRO Customer] - Set-up account - Monitor renewals (First three months, 6 and 12 months) - Monitor pending movements
Main Responsible	Customer Support team (SAC)
Performance Criteria	- Customer churn rate - Net promoter score

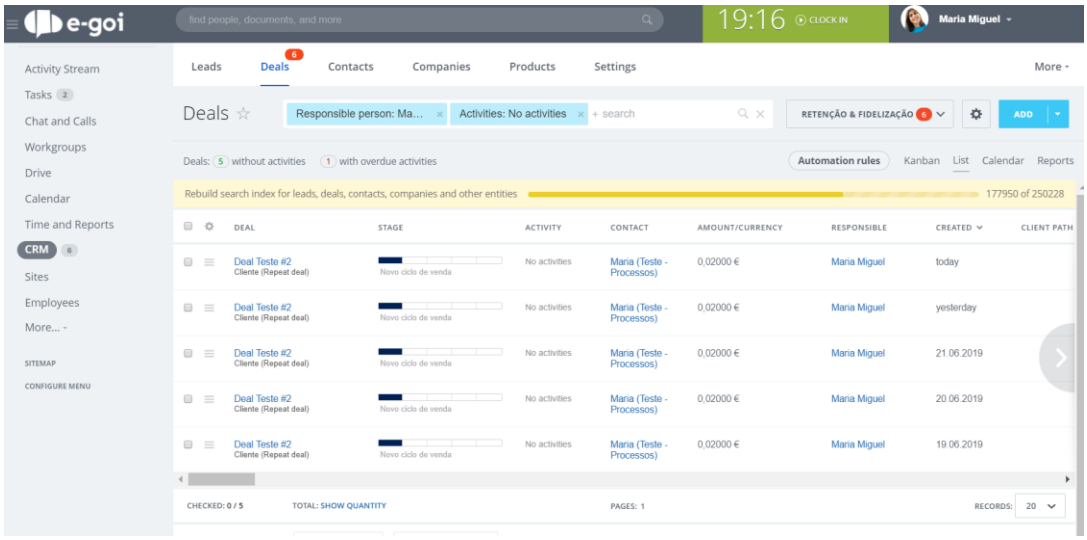
Process Name	Monitor Customer - Corporate
Application Scope	Corporate customers
Purpose	Ensure that customers' needs and expectations are met by the company; Assess satisfaction and determine improvements
Trigger	Notification for customer follow-up received/ Deployment of account revision protocols
Inputs	Notification for customer follow-up received/ Deployment of account revision protocols
Result	Customer remains with the company and is satisfied with the service and product; Detect difficulties, problems and future opportunities
Outputs	Customer feedback; Business Opportunity
Main Phases	- Review account - Contact customer
Main Responsible	Sales Corporate team (Account Manager)
Performance Criteria	- Customer churn rate

APPENDIX G: CRM Interfaces

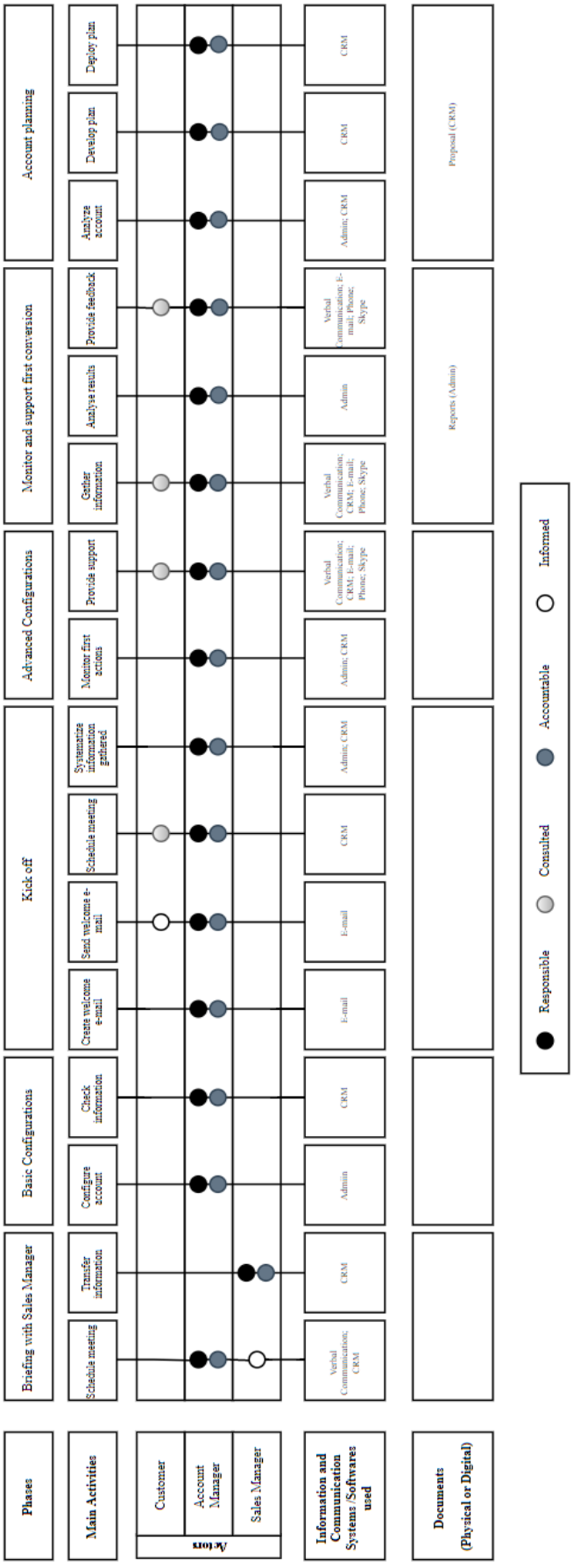


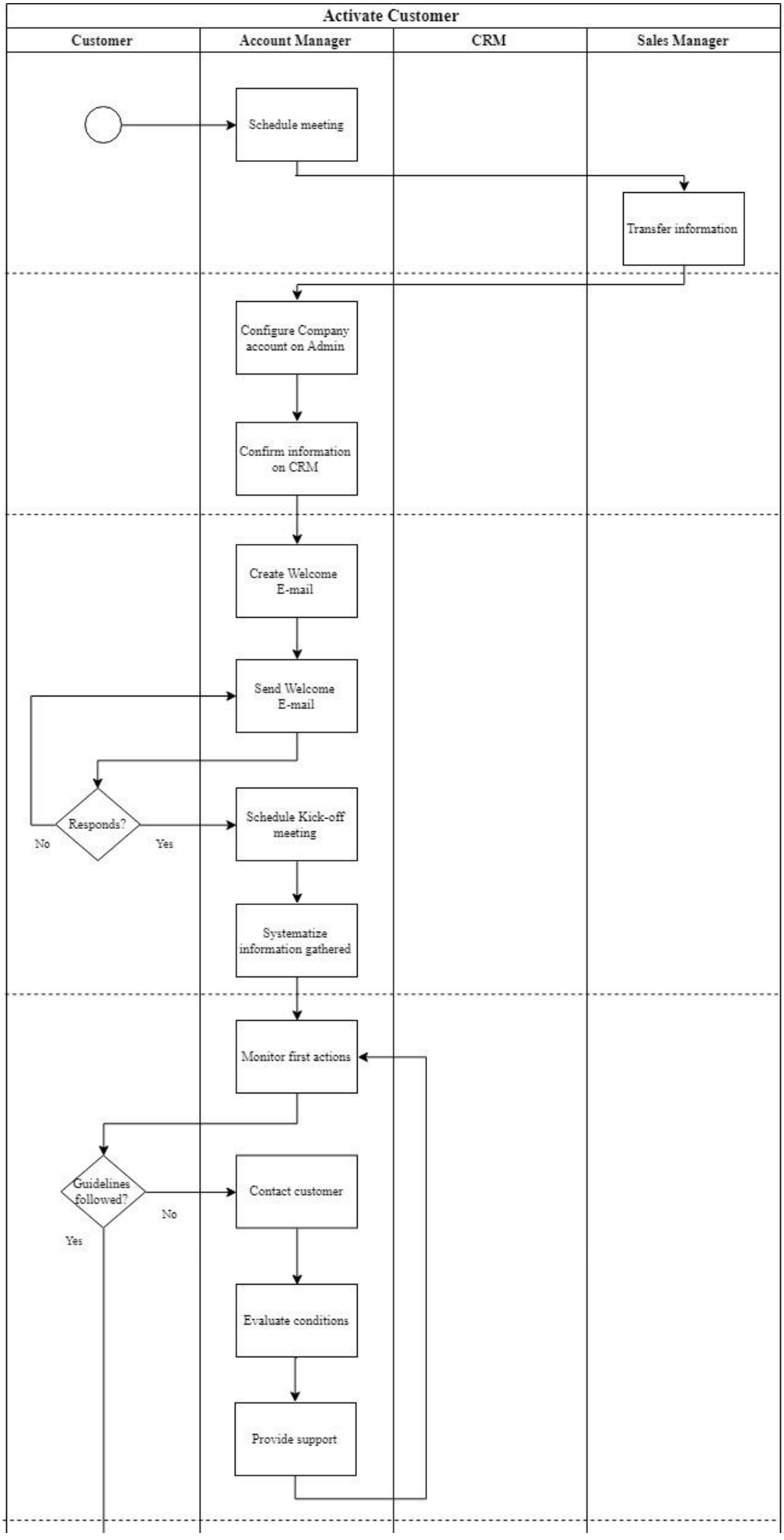


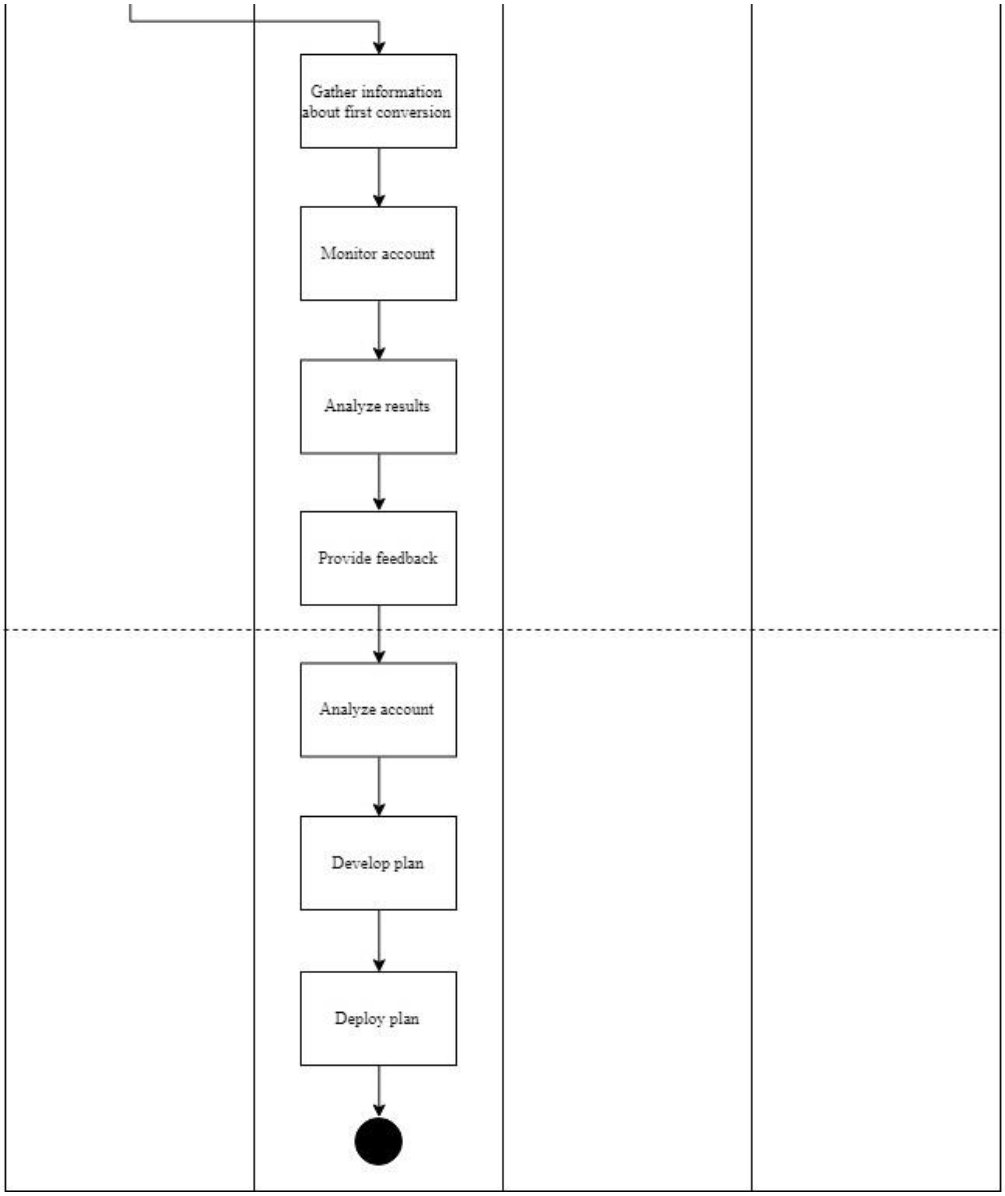



e-goi
find people, documents, and more
19:16
CLOCK IN
Maria Miguel
Activity Stream
Tasks 2
Chat and Calls
Workgroups
Drive
Calendar
Time and Reports
CRM 6
Sites
Employees
More... -
SITEMAP
CONFIGURE MENU
Leads
Deals 6
Contacts
Companies
Products
Settings
More -
Deals
Responsible person: Ma...
Activities: No activities
+ search
RETENÇÃO & FIDELIZAÇÃO 6
ADD
Deals: 5 without activities
1 with overdue activities
Automation rules
Kanban
List
Calendar
Reports
Rebuild search index for leads, deals, contacts, companies and other entities
177950 of 250228
DEAL
STAGE
ACTIVITY
CONTACT
AMOUNT/CURRENCY
RESPONSIBLE
CREATED
CLIENT PATH
Deal Teste #2
Cliente (Repeat deal)
Novo ciclo de venda
No activities
Maria (Teste - Processos)
0,02000 €
Maria Miguel
today
yesterday
21.06.2019
20.06.2019
19.06.2019
CHECKED: 0 / 5
TOTAL: SHOW QUANTITY
PAGES: 1
RECORDS: 20

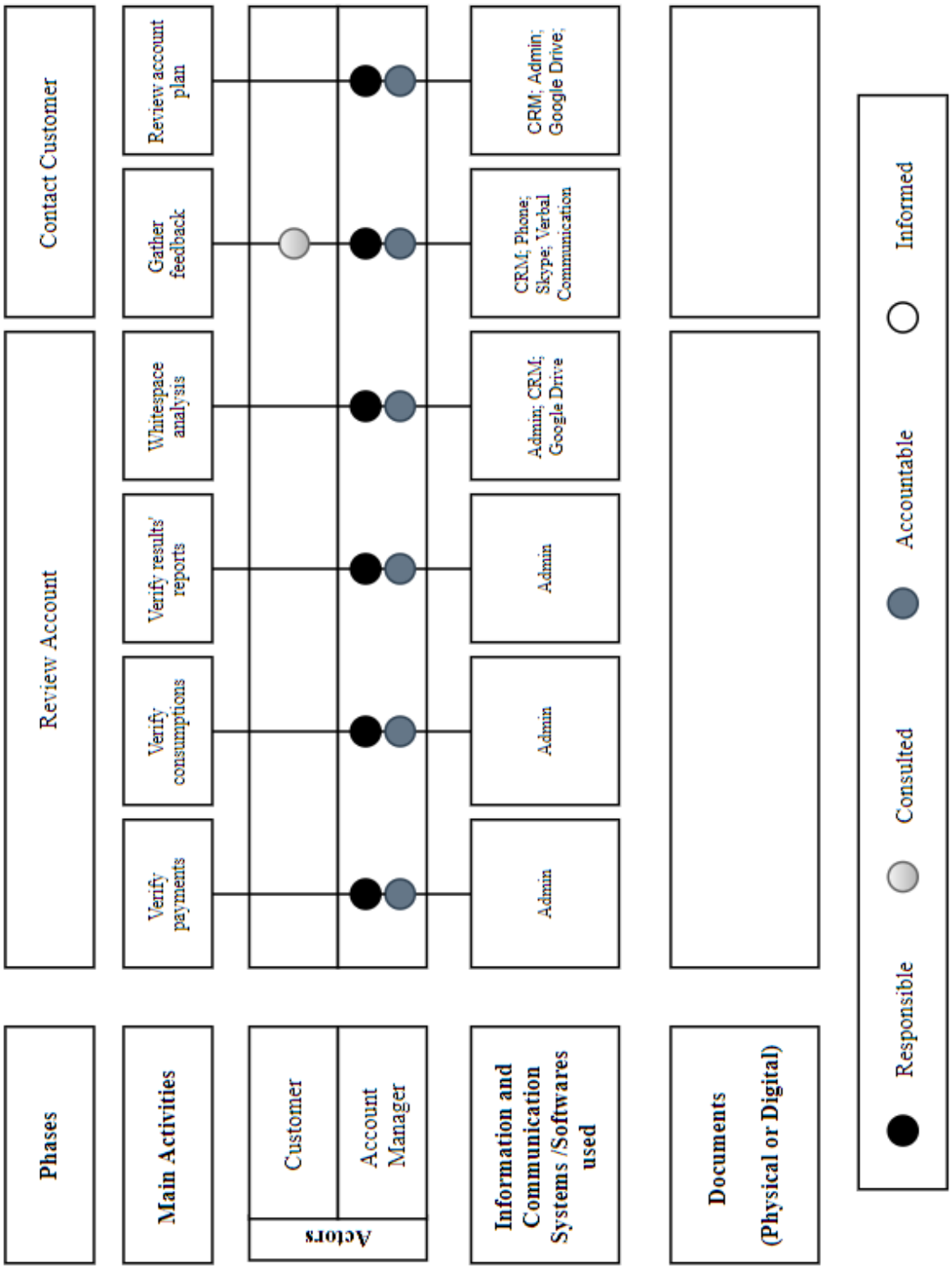
APPENDIX H: Process Activate Customer

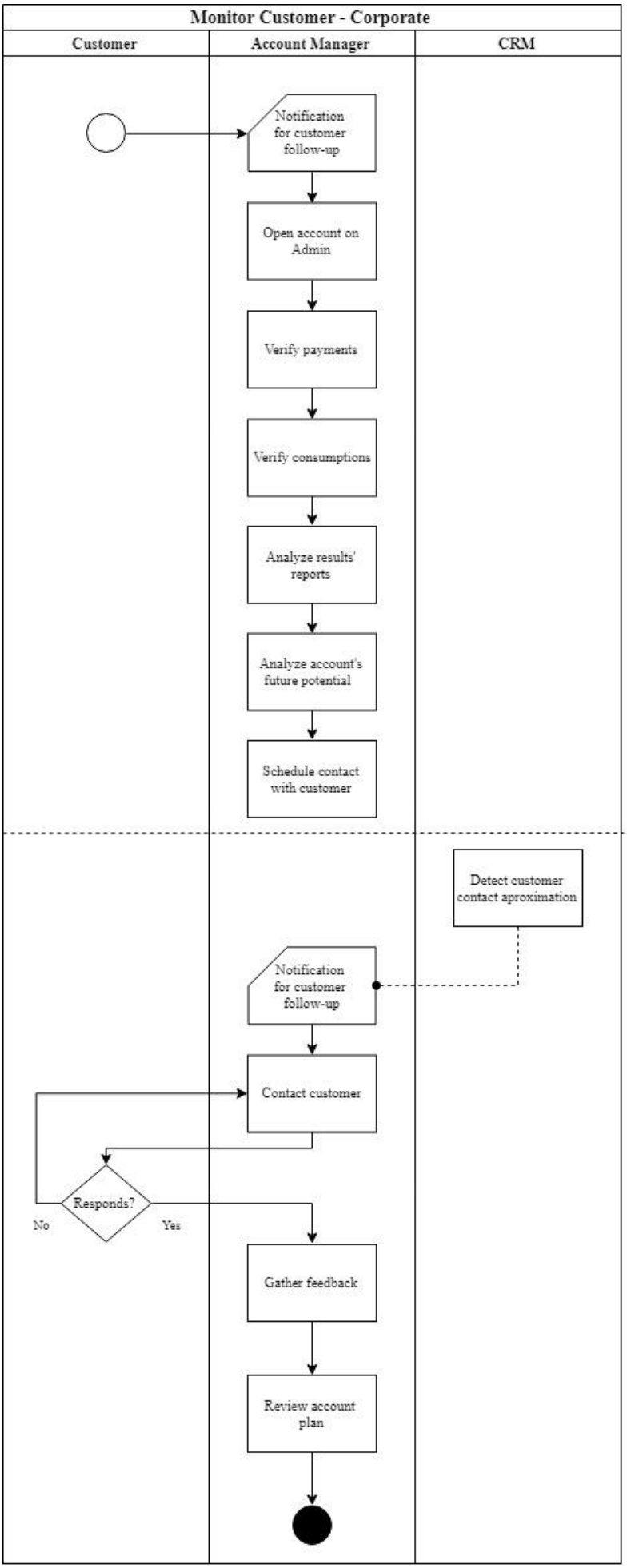



Activate Customer
Customer
Account Manager
CRM
Sales Manager
Schedule meeting
Transfer information
Configure Company account on Admin
Confirm information on CRM
Create Welcome E-mail
Send Welcome E-mail
Responds?
No
Yes
Schedule Kick-off meeting
Systematize information gathered
Monitor first actions
Guidelines followed?
No
Yes
Contact customer
Evaluate conditions
Provide support

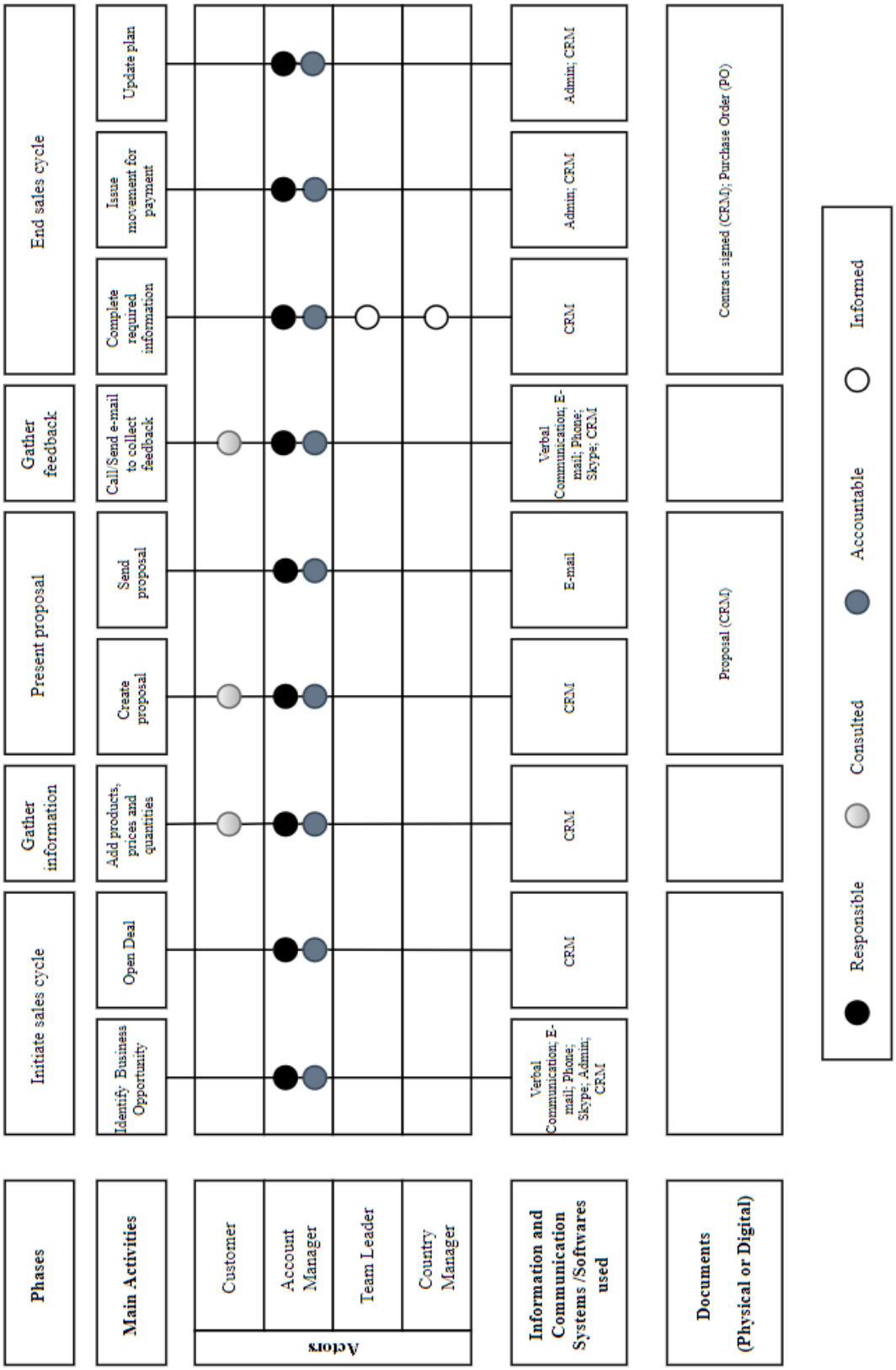

Gather information about first conversion
Monitor account
Analyze results
Provide feedback
Analyze account
Develop plan
Deploy plan

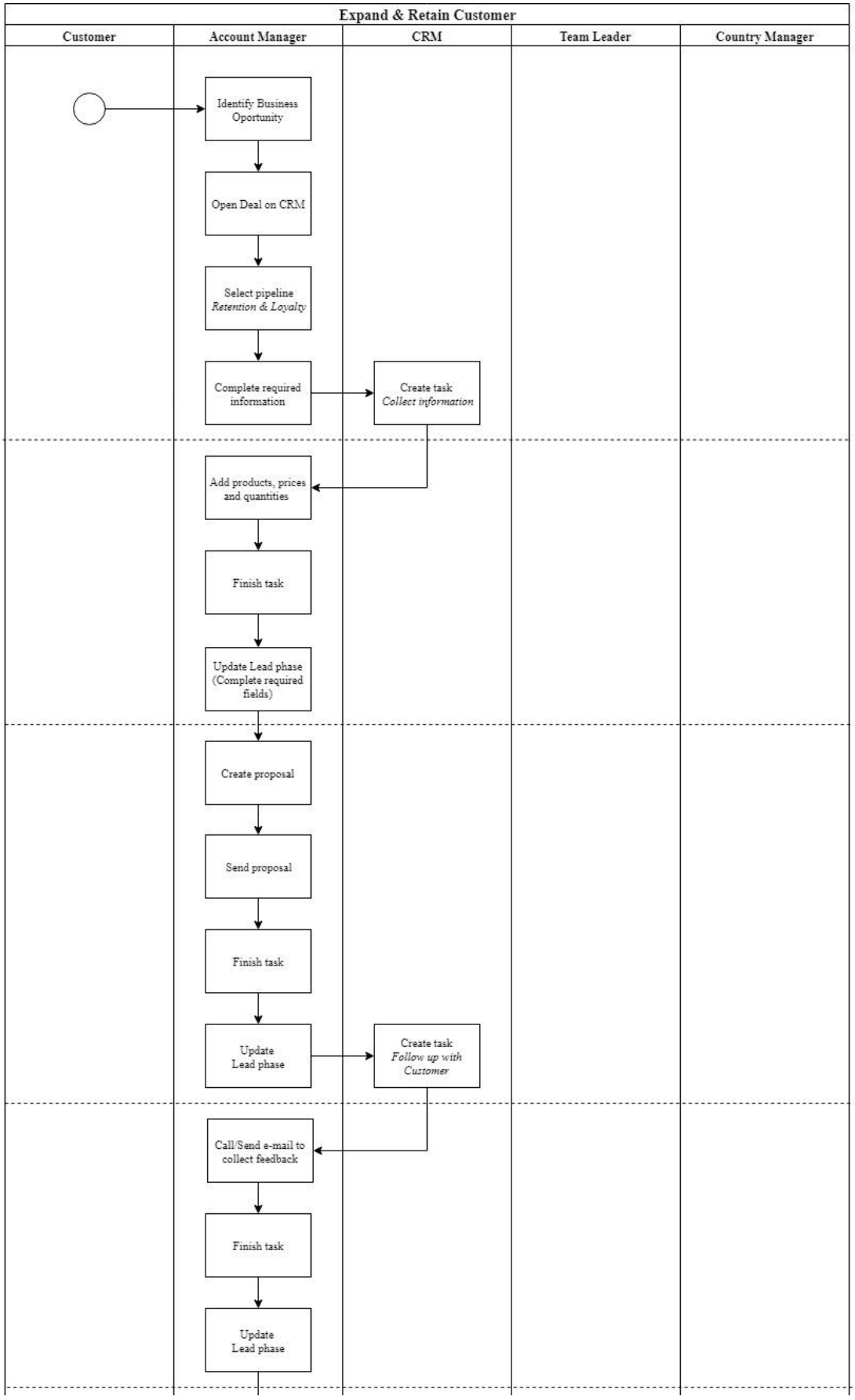
APPENDIX I: Process Monitor Customer

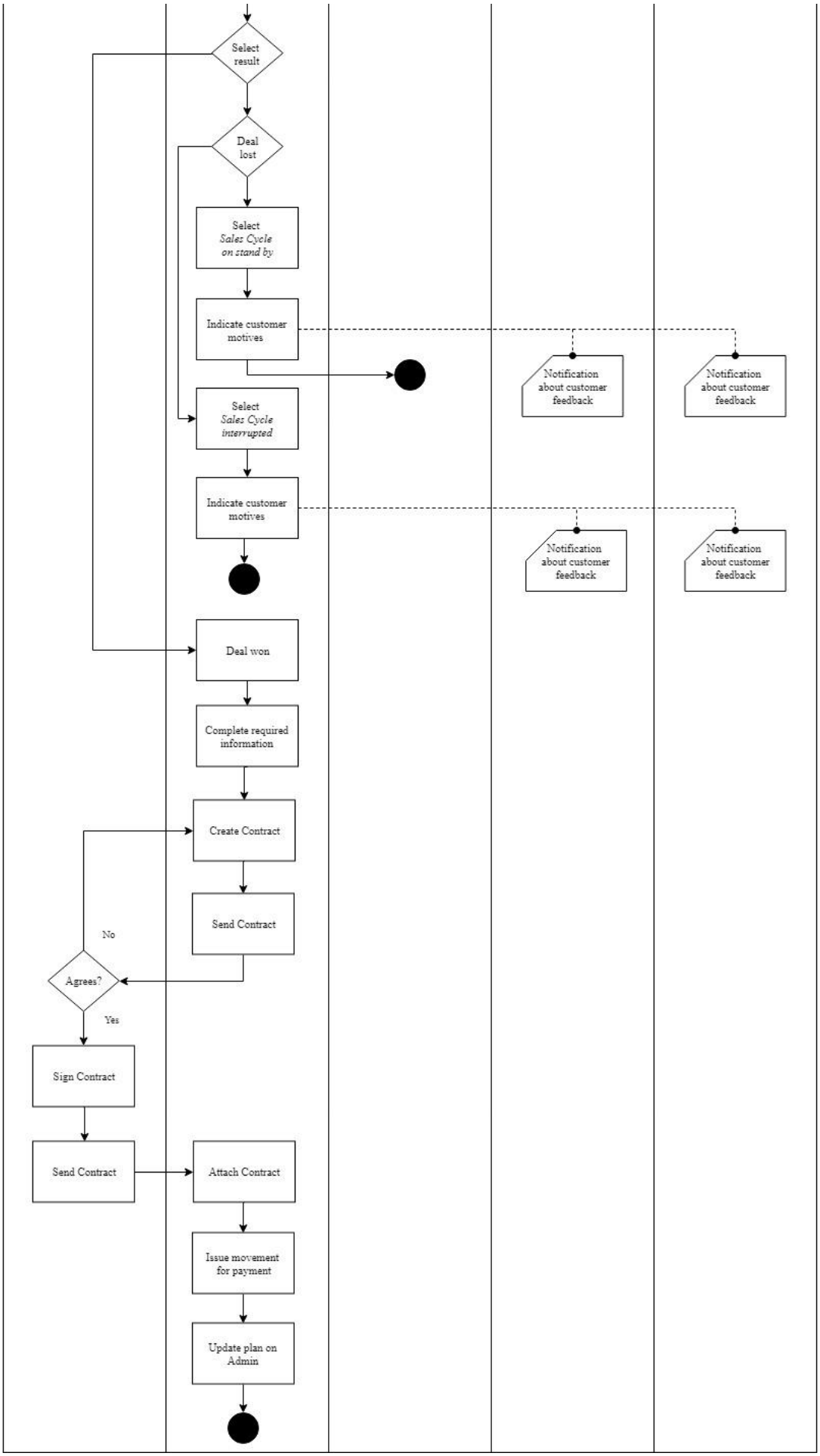


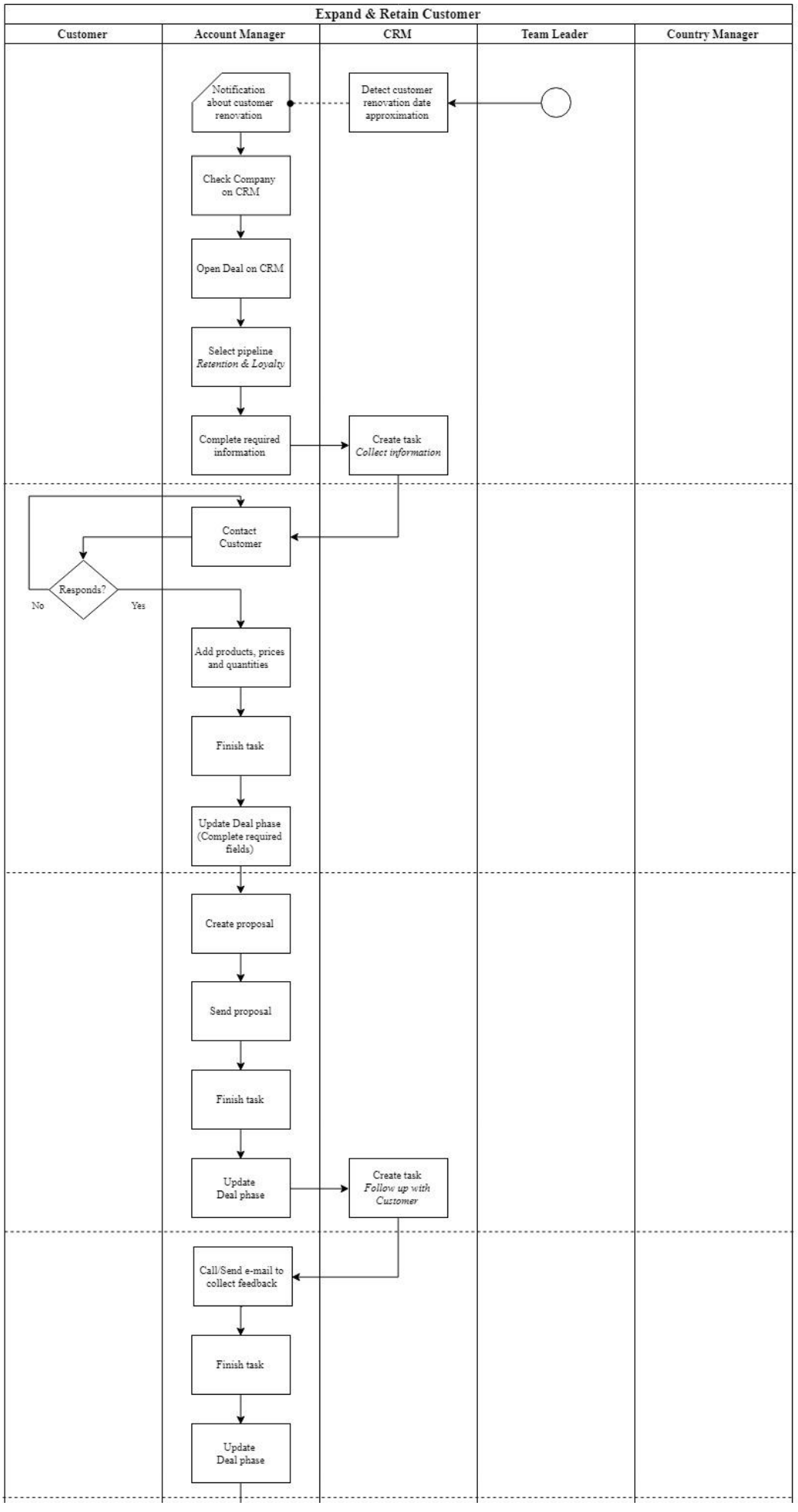

Monitor Customer - Corporate
Customer
Account Manager
CRM
Notification for customer follow-up
Open account on Admin
Verify payments
Verify consumptions
Analyze results' reports
Analyze account's future potential
Schedule contact with customer
Detect customer contact aproximation
Notification for customer follow-up
Contact customer
Responds?
No
Yes
Gather feedback
Review account plan

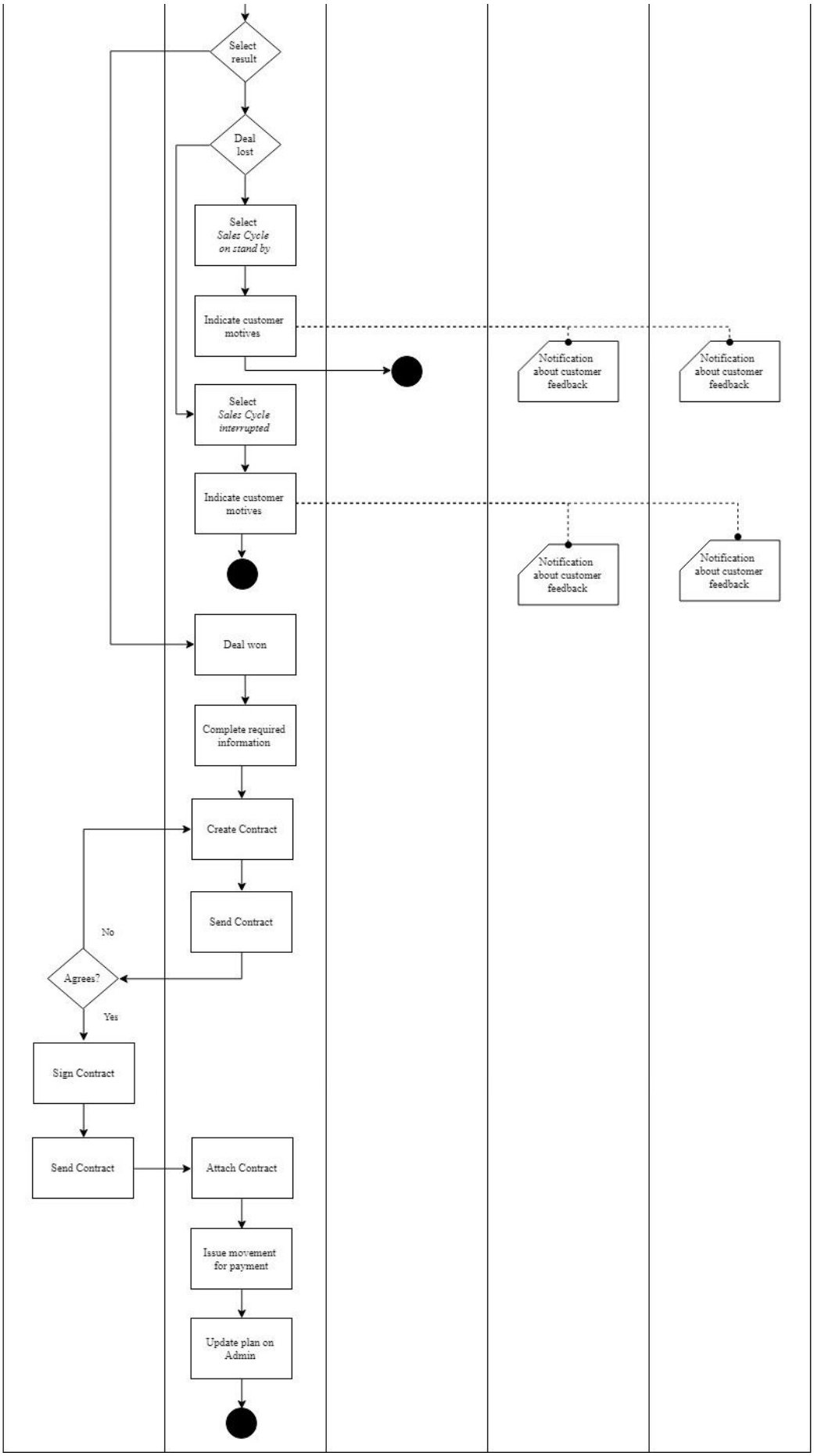
APPENDIX J: Process Expand & Retain Customer

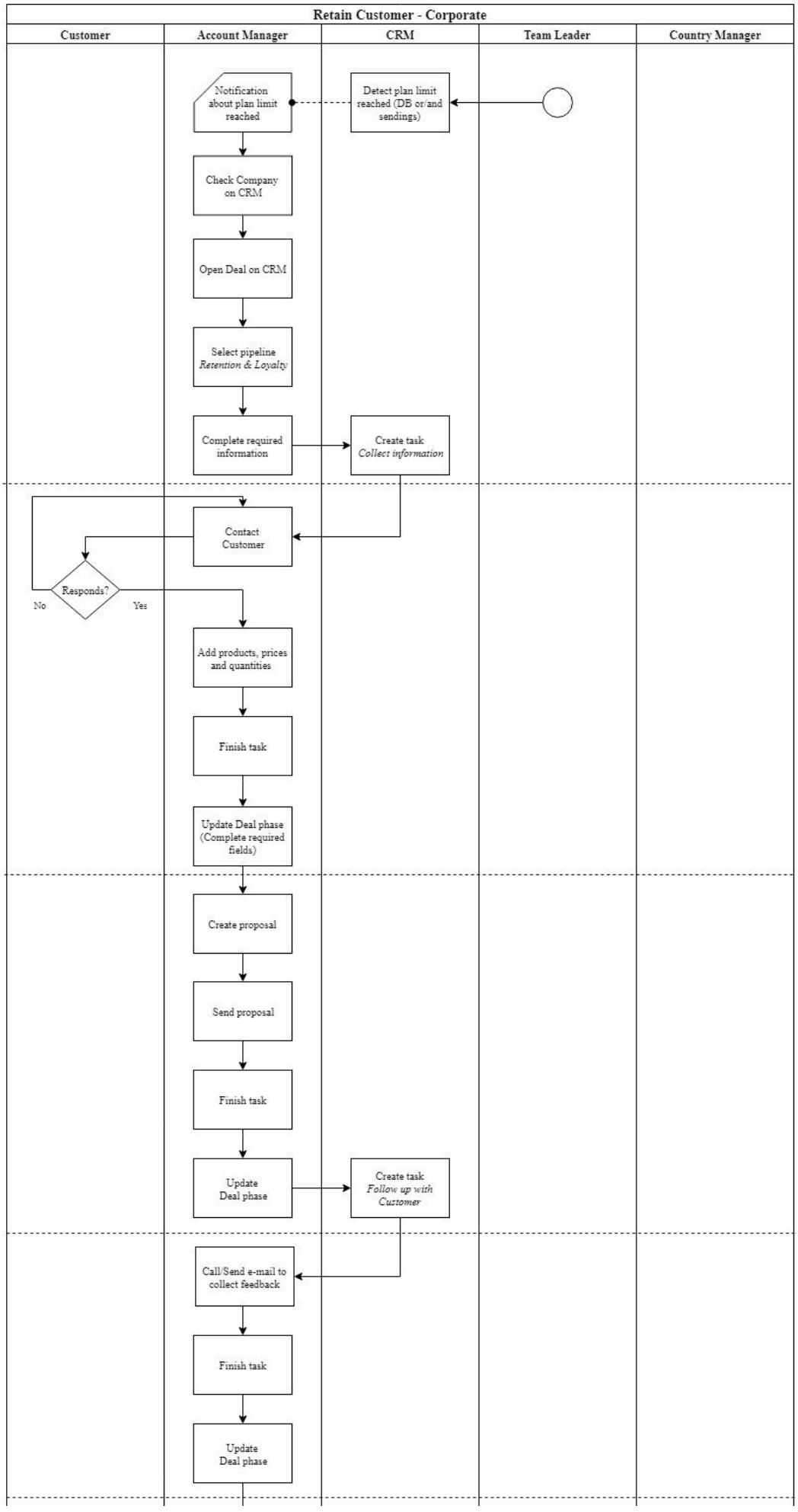


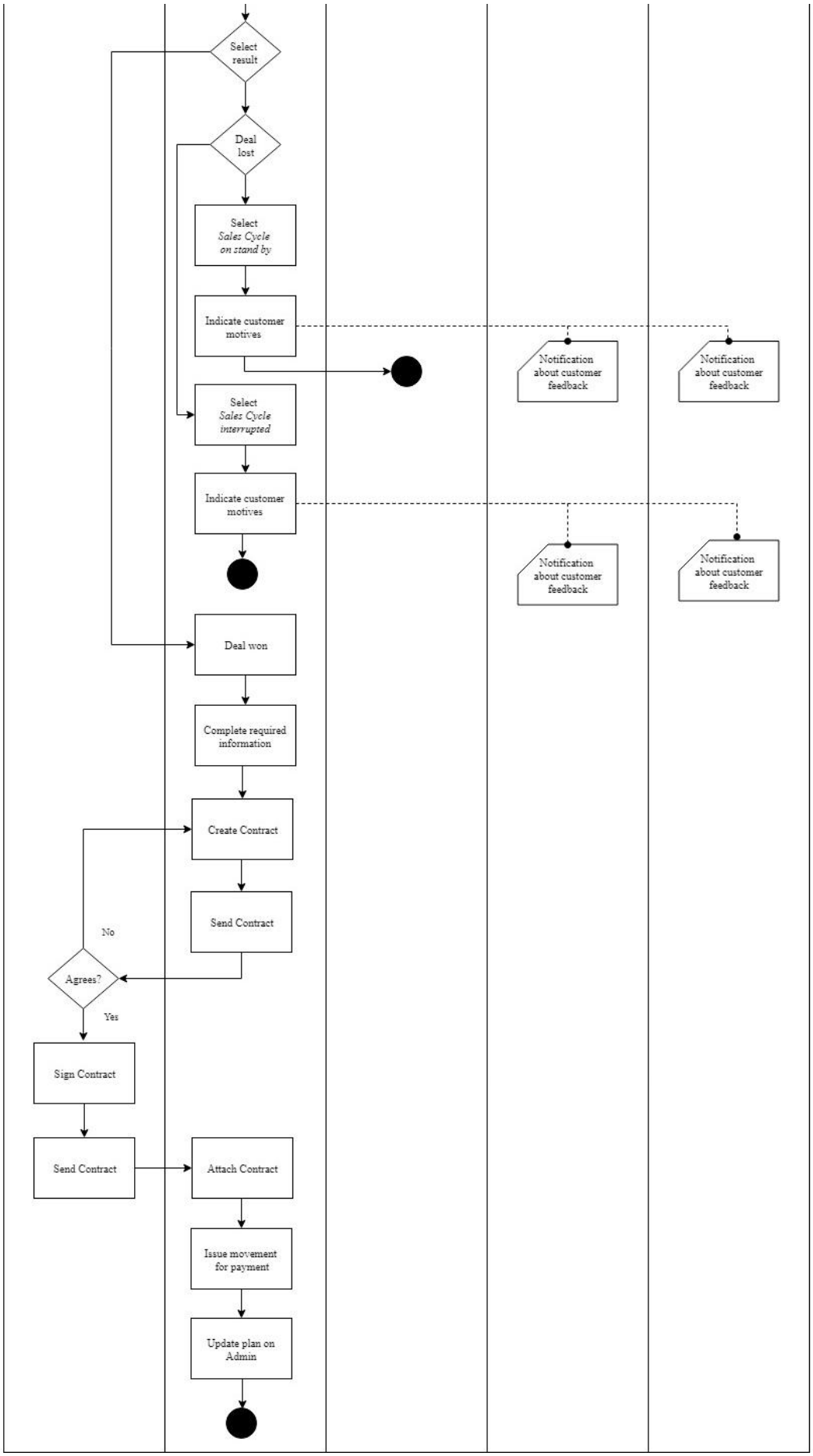

Expand & Retain Customer
Customer
Account Manager
CRM
Team Leader
Country Manager
Identify Business Oportunity
Open Deal on CRM
Select pipeline Retention & Loyalty
Complete required information
Create task Collect information
Add products, prices and quantities
Finish task
Update Lead phase (Complete required fields)
Create proposal
Send proposal
Finish task
Update Lead phase
Create task Follow up with Customer
Call/Send e-mail to collect feedback
Finish task
Update Lead phase


Select result
Deal lost
Select Sales Cycle on stand by
Indicate customer motives
Notification about customer feedback
Notification about customer feedback
Select Sales Cycle interrupted
Indicate customer motives
Notification about customer feedback
Notification about customer feedback
Deal won
Complete required information
Create Contract
Send Contract
No
Agrees?
Yes
Sign Contract
Send Contract
Attach Contract
Issue movement for payment
Update plan on Admin

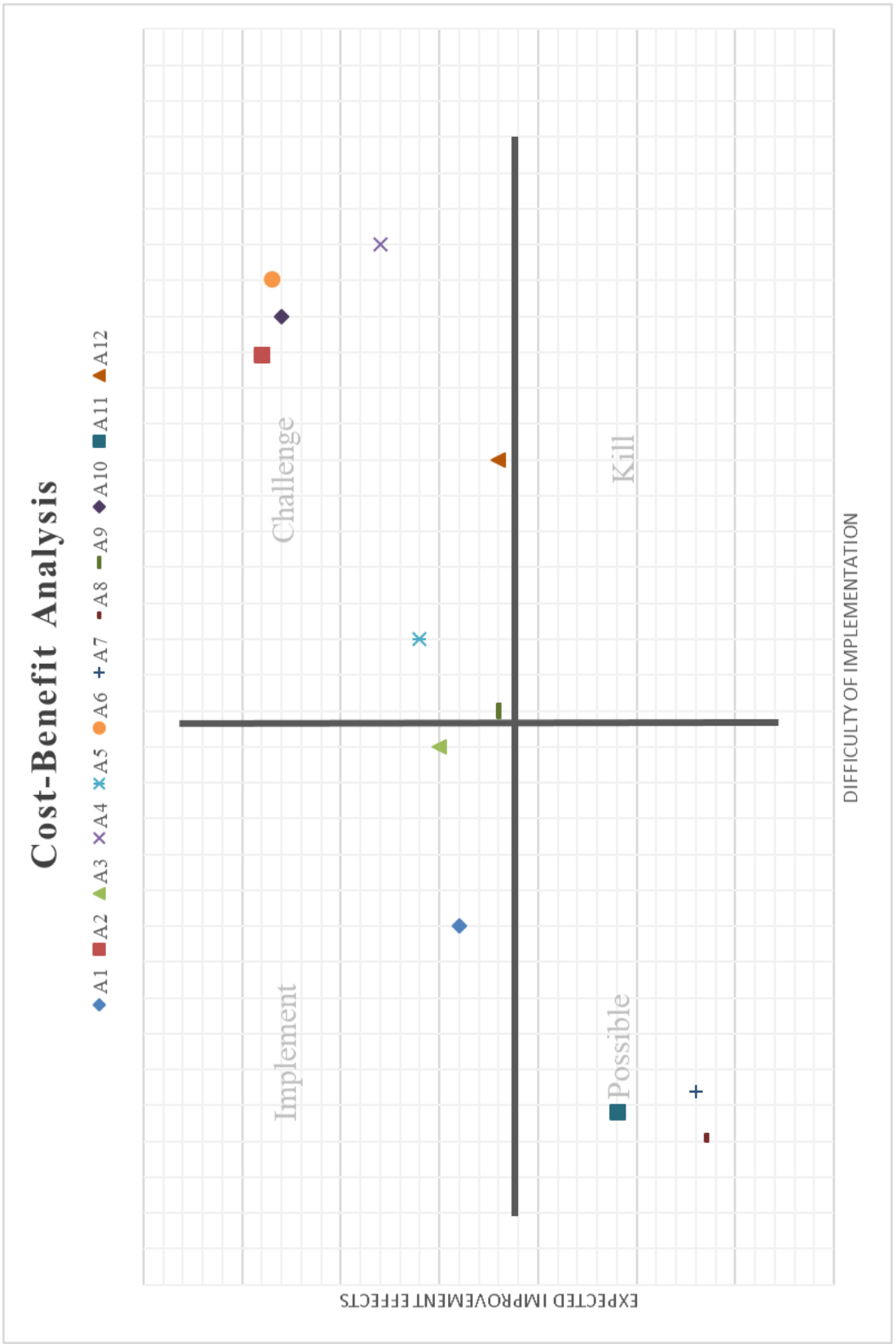

Expand & Retain Customer
Customer
Account Manager
CRM
Team Leader
Country Manager
Notification about customer renovation
Detect customer renovation date approximation
Check Company on CRM
Open Deal on CRM
Select pipeline Retention & Loyalty
Complete required information
Create task Collect information
Contact Customer
Responds?
No
Yes
Add products, prices and quantities
Finish task
Update Deal phase (Complete required fields)
Create proposal
Send proposal
Finish task
Update Deal phase
Create task Follow up with Customer
Call/Send e-mail to collect feedback
Finish task
Update Deal phase


Select result
Deal lost
Select Sales Cycle on stand by
Indicate customer motives
Notification about customer feedback
Notification about customer feedback
Select Sales Cycle interrupted
Indicate customer motives
Notification about customer feedback
Notification about customer feedback
Deal won
Complete required information
Create Contract
Send Contract
No
Agrees?
Yes
Sign Contract
Send Contract
Attach Contract
Issue movement for payment
Update plan on Admin


Retain Customer - Corporate
Customer
Account Manager
CRM
Team Leader
Country Manager
Notification about plan limit reached
Detect plan limit reached (DB or/and sendings)
Check Company on CRM
Open Deal on CRM
Select pipeline Retention & Loyalty
Complete required information
Create task Collect information
Contact Customer
Responds?
No
Yes
Add products, prices and quantities
Finish task
Update Deal phase (Complete required fields)
Create proposal
Send proposal
Finish task
Update Deal phase
Create task Follow up with Customer
Call/Send e-mail to collect feedback
Finish task
Update Deal phase


Select result
Deal lost
Select Sales Cycle on stand by
Indicate customer motives
Notification about customer feedback
Notification about customer feedback
Select Sales Cycle interrupted
Indicate customer motives
Notification about customer feedback
Notification about customer feedback
Deal won
Complete required information
Create Contract
Send Contract
No
Agrees?
Yes
Sign Contract
Send Contract
Attach Contract
Issue movement for payment
Update plan on Admin

APPENDIX K: Cost-Benefit Analysis



APPENDIX L: Gantt Chart