# MESG Mestrado em Engenharia de Serviços e Gestão

# Process redesign as a key strategy for service innovation: a case in a consulting company

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#### **Master Thesis**

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#### Resumo

A inovação dos serviços prestados é uma das estratégias que as empresas têm adotado na busca por consolidação e diferenciação no mercado. Para tal, por vezes é necessário combinar ações internas e externas à organização para aumento da excelência operacional e, principalmente, entrega de maior valor ao cliente. Com o intuito de proporcionar inovações incrementais nos serviços prestados por uma empresa de serviços de consultoria do segmento de internacionalização de negócios, a presente pesquisa foi desenvolvida no âmbito da definição e aplicação de uma metodologia para análise e redesenho de um processo-chave de negócio baseada nas boas práticas de *Business Process Management* (BPM), com proposta de soluções que atendam à necessidade do sistema de prestação de serviços como um todo.

A fim de estruturar a pesquisa, a revisão de literatura foi a base para compilação das boas práticas de gestão de processos e de serviços utilizadas para entender o contexto organizacional e a problemática existente, para a análise do estado atual do processo e geração de soluções fiáveis. Foram, então, definidos e descritos os métodos utilizados para desenvolver o trabalho, com a posterior aplicação da metodologia no caso real empresarial de forma a responder às questões da pesquisa.

As soluções propostas englobam diversos aspectos, como flexibilização de tarefas, definição de responsabilidades e decisores, melhoria da comunicação interna e externa, gestão do relacionamento com cliente e gestão da informação, comprovando a necessidade e efetividade de uma análise do sistema de serviços – processos, pessoas, tecnologia, artefatos físicos – a fim de propor melhorias úteis para gestão e eficiência organizacional, como também para gerar impacto positivo para a marca da empresa perante o valor agregado aos serviços e consequente satisfação do cliente.

Por fim, foram sugeridos meios para medir o novo processo por meio da definição de indicadores de desempenho alinhados com os objetivos estratégicos, bem como as próximas etapas para a implementação do processo reprojetado, com testes do processo e sua integração ao sistema organizacional de gestão da qualidade.

#### **Abstract**

Service innovation has been one of the strategies adopted by companies in order to achieve a consolidation and differentiation in the market. To this purpose, organizations may need to combine internal and external actions to increase operational efficiency and, above all, deliver greater value to the customer. In this sense, this research aims to propose incremental innovations in services provided by a consultancy company in the business internationalization segment, through the definition and application of a methodology for analysis and redesign of a key business process based on Business Process Management (BPM) and Service Design good practices offering solutions that meet the needs of the service delivery system as a whole.

The structuring of the research relied on the literature review as a basis for compiling the good practices of process and service management, used to understand the organizational context and the existing problem, as well as for the analysis of the current state of the process and the generation of reliable solutions. The methods used in the development of the work were then defined and described, with the subsequent application of the methodology in the real business case in order to answer the research questions.

The proposed solutions encompass several aspects, such as loosening tasks, defining responsibilities and decision makers, improving internal and external communication, managing customer relationships and managing information. This reinforces the need and effectiveness of a wider analysis, that is, the service system analysis – processes, people, technology, physical artifacts – allowing the proposal of useful improvements for management and organizational efficiency, as well as the generation of a positive impact in the company's brand, in view of the added value of services and consequent customer satisfaction.

Finally, revised means for measuring the new process were suggested through the definition of performance indicators, as well as the next steps for the implementation of the redesigned process, with prior tests and integration of the new process into the organizational quality management system.

Keywords: Service innovation, Business process redesign, Business Process Management

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#### List of abbreviations

ABPMP – Association of Business Process Management Professionals International

BMC – Business Model Canvas

BPM – Business Process Management

BPD – Business Process Diagram

BPMN - Business Process Model and Notation

**BPMS - Business Process Management System** 

BU – Business Unit

B2B – Business-To-Business

CCO - Chief Commercial Office

CM – Client Manager

COO - Chie Operations Office

CRM – Customer Relationship Management

ERP – Enterprise Resource Planning

ISO – International Organization for Standardization

IS – Information System

IT – Information Technology

KOM – Kick-off Meeting

**KPI** – Key Performance Indicator

PM – Project Manager

QMS – Quality Management System

NAS – Market Access' documental system

SD - Service Design

S-D Logic – Service Design Logic

SOAPP - Market Access' ERP

SWOT – Strenght, Weakness, Opportunity, Threat

VBA – Visual Basic for Applications

#### 1 INTRODUCTION

#### 1.1 Context

The current dynamic economic environment in which companies are inserted has demanded smart and innovative strategies to ensure their competitiveness and, often, their survival. A customer-oriented strategy focused on offering greater value has gained prominence in business strategies, whose factors, such as technology, information management and innovation, have become pillars of many businesses around the world.

In this globalized and constantly changeable context, the internationalization of operations may be necessary in many cases – especially for European entities - regardless of the sector or size of the organization, aiming at increasing revenue, greater reach of performance and competitiveness in the market.

However, many variables can affect expansion to the foreign market, besides the legal, social, cultural, political, technological and marketing issues and difficulties that must be carefully considered and analyzed in order to successfully plan and execute the strategy. There is a greater risk of failure in internationalization whether the process is not well structured, and the consultancy companies may provide considerable value to it, by supporting entities with their expertise and resources to find the best strategy for their business expansion.

In turn, the nature of the internationalization consulting business demands customized solutions and a highly customer-centered business model, considering the specific needs, expectations and operational, financial, managerial and technological reality of each client.

Moreover, human capital and technology are key resources in this type of business model, which inevitably leads to the need for integrating knowledge and skills of its professionals with the assertive search for information in a timely manner, in addition to the efficient communication among the stakeholders, in order to provide the ideal solution to the customers.

In this context, the current research was developed in a Portuguese consulting company specialized in international business expansion. The company has projects carried out in more than 50 countries on five continents, and in order to achieve the objectives defined in its strategic guidelines, it believes that providing innovative services is the best way to streamline its growth and consolidate its position as an international consultancy.

#### 1.2 Problem description

In recent years, the consulting company has faced the challenge of constantly readjusting its operation and strategy to its value proposition due to its growth and the inevitably changes in the market, also due to the focus on customizing solutions for clients, as well as the quantity and the skills necessary for its staff as a result of the new demands.

The urgency for incremental innovations in the company's services has required a combination of increased value delivered to the customer – through the optimization of the services – with an extensive portfolio and a high level of customization, which can hinder the standardization of some processes and services.

As exposed by Belluzzo (2017), "in the current world of business, business relations have changed with information and communication technologies, and organizations have become more complex". Therefore, the need to update the business due to technological and market advances directly involves an ideal management of information and organizational changes to meet these needs. Furthermore, with the business growth, it is crucial to review and adapt the processes so that they are fit and proper to the new objectives of the company, guaranteeing what is essential and eliminating what is bureaucratic and slow.

For this reason, the company aims to review and innovate its service delivery system, by identifying customer needs, analyzing and redesigning its critical business processes and developing mechanisms to control them. These changes intend to solve some internal problems that can impact the quality of the services provided, such as bureaucracy, lack of automatization and standardization of tasks and processes and the time spent on non-value adding or avoidable processes. The challenge is to create easily deployable, less bureaucratic solutions, as it is necessary to be quick and objective in making decisions, exchanging knowledge and transferring information.

#### 1.3 Research objectives and questions

In order to delimit the execution of the present research, some specific objectives were established to be achieved.

- Define a conceptual methodology of process redesign applicable to similar cases;
- Propose a new (future) model to the critical process studied;
- Propose means to control the restructured process, with definition of operational and strategic key performance indicators (KPI's).

After the definition of the problem to be studied, the identification of the project objectives and the literature review carried out, it was possible to elaborate pertinent questions for guiding the research, whose answers based on this case intend to add value to the science. The referred questions are:

- RQ#1: What current aspects of the company's operation can be improved?
- RQ#2: What are customer needs that should be met more efficiently (added value)?
- RQ#3: How to redesign company processes in order to guarantee better efficiency and effectiveness in service delivery?

The formulation of the research questions followed the logic of internally and externally identifying the factors of company's improvement in the search for innovation in internationalization consulting services as a development factor and competitive differential in the market. In this context, the first question (RQ#1) aims to point out the issues and the consequent opportunities for improving the operational efficiency of companies in this segment, while the second question (RQ#2) concerns the aspects valued by customers in this type of service. With these questions answered, it becomes possible to study how to apply the concepts of process redesign in order to meet both internal and external needs (RQ#3).

#### 1.4 Research methodology

The object of the present research refers to the definition of a conceptual methodology for business process redesign and its subsequent application in a practical case in a consulting company specialized in business internationalization to solve identified organizational problems. The research took place at Market Access company over 4 months.

The scope of application of the redesign methodology in this research will be limited until the phase of solutions proposal and feasible means of measuring the process in the suggested context. The subsequent implementation and measurement of results are not included, although these final steps are suggested and described in the conceptual methodology developed, which can be applied a posteriori in order to certify the complete effectiveness of the methodology.

In this sense, the empirical approach of the research is deductive, generating real data of specific facts about the problem and analyzing them based on existing theoretical references. Likewise, the theme fits into the use of the Action Research methodology, since this methodology implies proposing solutions to real problems identified, allowing the researcher to act as an actor in the process, applying several methods for understanding the problem, generating and validating ideas, as well as interpreting data based on Business Process Management (BPM) and Service Design (SD) good practices.

Starting the research, a thorough literature review was carried out and it was possible to identify an appropriate redesign approach to be applied, also considering the prerogatives indicated by the company of necessity for process innovation including optimization in information management by the use of technological resources, with the main objective of increasing the value perceived by customers in the services provided by the consultancy. For this, it was pertinent to research about information management and information technology (IT).

The methodology proposed to redesign the selected process comprises of the following phases, as described in Figure 1 below.

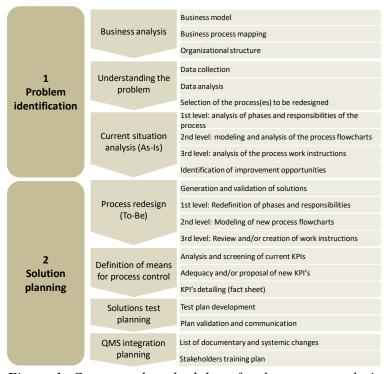


Figure 1: Conceptual methodology for the process redesign

In the first stage of organizational analysis, secondary data were used (documental analysis of Management Manual, processes fact sheets and functional descriptions), the business process mapping and organogram charts, and reviewing/updating an existing SWOT analysis. In order to identify the problem, primary data were collected by direct observation through participation in meetings of the Market team, as well as semi-structured interviews with senior management, and through the analysis of existing documents, such as operational reports and institutional documents. Customer data were gathered from internal sources, interviews with top management and analysis of data from customer satisfaction survey history. Furthermore, the influence of stakeholders was analyzed through Power-Interest matrix tool, just as the requirements definition, which was carried out using a Traceability matrix tool.

After analyzing the data gathered and defining the process to be redesigned, the As-Is and To-Be analysis were developed using the multi-level business process modeling method. Multi-level modeling decomposes a complex process into three levels, detailing it, in order to better analyze it, producing Responsibility matrixes, Workflow charts (Swim lane) and Work instructions. It was used Bizagi Modeler software to create the swim lanes charts.

As a result of the As-Is analysis Responsibility matrix and Swim lane charts were drawn, which enabled to know how and when problems take place, and who is involved and is impacted by the problem. Then, the ideas for solutions were generated through brainstorming and benchmarking methods, from the combined analysis of gaps and requirements defined. The Tobe modeling produced a new responsibility matrix, new swim lane charts and work instructions documents for key activities.

Afterwards, the means for measuring the redesigned process were defined through the analysis of existing KPIs (objective and compliance with the new process), that is, if they are still useful, and proposing new ones that better respond to the new process and the purpose it aim to.

Likewise, it was suggested the creation of a test plan for the redesigned process, with actors, activities, feedback schedule, choice of some "pilots projects" to measure the process and definition of rules and responsibilities for validation of the changes and improvements necessary. Additionally, for integrating the improvements to the quality management system, the actions necessary were described, concerning essentially employees training, adaptation/addition of documents and allocation of documents in the documental system.

#### 1.5 Dissertation structure

The present study is divided in five chapters, following the good practices and norms of the scientific research to which it aims to.

The *Introduction* chapter contains the general overview of the theme, information on internationalization and the importance of internationalization consultancy for organizations looking to operate in the foreign market and presents the company that is the focus of the case study in question. The research problem is also briefly described, as well as the objectives to be achieved, the questions that this research intends to answer, and its methodology applied.

Theoretical background chapter presents a research on the main themes to be addressed and developed in the research: Processes and their classifications; BPM; Innovation; Information Management and; Information and Communication Technologies.

The following chapter refers to the *Characterization of the Research*, in which the company is detailed—its history and numbers, business model, organizational structure and macroprocesses currently applied—also identifying the details of the problem to be studied, the project requirements and stakeholders involved, permitting then to prioritize a process to be redesign and perform the analysis of its current situation (As-Is).

The *Proposed Solution* chapter concerns the sequential steps of the process redesign, starting by the identification of possible solutions to the selected problems, remodeling of the process, definition of control measures for the new process and finally proposing how to test and integrate the redesigned process into the company's management system.

The last chapter, *Conclusion*, exposes the results obtained, the expected gains and difficulties verified during the research. Equally important, it identifies research contributions to science and possible recommendations for future research.

#### 2 THEORETICAL BACKGROUND

#### 2.1 Business Process

In order to understand business process, first it was researched about the concept of business, highlighting two different definitions. Davenport, T. H. (1994 as cited in de Morais, R. M., Kazan, S., de Pádua, S. I. D., & Costa, A. L. (2014) defines process as "a specific order of work activities in time and in space, with a beginning, an end and clearly identified inputs and outputs". Yet, in the "Process Approach in ISO 9001:2015" paper from ISO (International Organization for Standardization), process is described as a "set of interrelated or interactive activities that use inputs to deliver an intended result" (ISO, 2015).

Two aim elements can be distinguished for generating process improvement ideas, according to the vision and strategy of the involved organizations: Performance dimensions, which delineate the kind of performance measures that need some improvement, such as costs, time and external quality, or; the degree of improvement, which addresses whether incremental or radical improvements are needed. (Vanwersch et al., 2015)

Then, business process can be understood as a set of tasks and activities as part of a business environment with a defined purpose of receiving inputs, processing them and delivering outputs for the following processes and/or to the external environment. Guha & Kettinger (1993); Strnadl (2006 as cited in Trkman, 2010) added about business process purpose that it "must be performed to deliver value to customers or to fulfill other strategic goals", what is also ratified by van der Aalst, W. M., La Rosa, M., & Santoro, F. M. (2016), that believe "a better process is thus one that better contributes to meeting the strategic objectives of an organization".

"Although many organizations are involved in process improvement initiatives, only a small number of them follow a holistic vision and focus on the level of organizational processes" (Neubauer, 2009 as cited in de Morais et al., 2013). Switching from functional to process management approach can be demanding for most enterprises, which requires a new view about the business, identifying the types and relevance of their processes, as well the responsibilities about the processes progress and the resources and methods of analyzing and controlling them.

#### 2.2 Business process redesign - BPR

According to Davenport, T. H., & Short, J. E. (1990), business process redesign is "the analysis and design of workflows and processes within an organization." The literature about process structured changes has presented many studies with different approaches and classifications regarding the complexities of the changes implemented. For some authors there is a difference between process reengineering and process redesign, so that reengineering assumes deeper and drastic changes – likely including structured change programs – and the redesign is more neutral and less impacting.

The systematic and broader scope of process reengineering is the main difference from process redesign. As explained by Mansar, S. L., & Reijers, H. A. (2007), while the first encompasses all aspects of restructuring an organization's processes, e.g. from change management to project management issues, the processes redesign is concerned with how to articulate a process in terms of their tasks and resources, which means process redesign probably is a part of process reengineering project.

On the other hand, other researchers interpret process redesign and process reengineering as the same concept. Regardless the nomenclature used, process redesign aims "at creating a process-oriented attitude instead of a functional-oriented one because the business processes provide companies, not products, with long-term success (Hanafizadeh, P., Moosakhani, M., & Bakhshi, J., 2009).

Regarding the evaluation of such changes in the processes, Hanafizadeh, P. et al (2009) defended that "simulation or practitioners' work experiences can be exploited to provide a proper analysis of the effects of implementing the best practices on organization components".

After study several companies that implemented process reengineering, Hall, G., Rosenthal, J., Wade, J. (1993, as cited in Narasimhan, R., & Jayaram, J., 1998) concluded that there are six main issues that can impact the reengineering performance: "the change proposed radical or incremental; the performance measures used; the impact of information technology; the impact of human factors; the presence or absence of a process architecture; and the link between BPR and corporate strategy".

In short, both radical and incremental changes tend to cause some impact in the implementation if they are not well structured and substantiated, which means, if there is not a reasonable and in-depth analysis about the business and about the process gaps, as well a strong focus on proposing changes that add value for the organization in terms of performance and visibility.

#### 2.3 Business Process Management - BPM

Throughout history, the evolution of production systems has drastically changed what is meant by the production process and added value. The search for process optimization and efficiency currently encompasses, according to Hermann, M., Pentek, T., & Otto, B. (2016 as cited in van der Aalst et al., 2016) state, "a 'smart' manufacturing systems using a combination of embedded systems, sensors, networks, service orientation, big data, and analytics. Yet, in such modern production processes, the product is often information provisioned through a service, rather than a physical entity".

Business process management was defined by Trkman (2010) as:

All efforts in an organization to analyze and continually improve fundamental activities such as manufacturing, marketing, communications and other major elements of company's operations, and it is considered successfully implemented if it continuously meets predetermined goals, both within a single project scope and over a longer period of time.

In addition, Paim, R., Caulliraux, H.M. and Cardoso, R. (2008, as cited in de Morais et al., 2013) asset that:

In the functional approach, processes are managed in isolation, the organization has silo characteristics with low capacity for coordination and low market orientation and BPM does not eliminate an organization's business units (BU's) and functional units, but in a horizontal perspective, it prioritizes the structuring of its end-to-end work flow with an emphasis on the client: the organization molds its operations to optimize the generation of value for the client in the various processes it implements in its business portfolio.

Besides that, more and more streamlined processes require technological support to speed up execution, control, as well as to provide more consistent and powerful data and information. In this sense, BPM is closely related to this type of tools, what is confirmed by van der Aalst (2004, 2013); Weske (2007) as cited in Vanwersch et al. (2015): "the discipline of BPM integrates insights from the information systems and management sciences domain, and has developed a variety of methods, techniques, and tools to support the (re)design, enactment, management, and analysis of operational business processes".

Attaran (2004, as cited in Trkman (2010) argues that "misunderstanding of BPM concept and misapplication of the term is one of the most often cited reasons for BPM failure". He also affirms, as cited in Grant (2002), that "the sole focus on processes in the context of other equally important factors being ignored is one of the main causes of failure".

For ensuring the success of BPM in a company, Trkman (2010) states that:

Firstly it there should be the fit between the business environment and business processes and then, a proper organization and continuous improvement efforts in order to assure sustained benefits from BPM, as well as the proper fit between the tasks in the business processes and information technology/systems must exist.

For McCormack et al. (2009), "by achieving greater maturity in BPM, the organization will have greater control over results, better projection of goals, costs and performance, gain more efficiency to achieve defined objectives and improve management of the ability to propose innovations". Improvements resulting from a BPM initiative can be incremental or radical and are directly related to the organization's process management maturity level. The more mature the company, the easier the implementation of the BPM approach, facilitating the work of the BPM project team, the understanding of the processes, and the receptivity of people in relation to the need for improvement, which is the way and the way to change.

According to Vanwersch et al. (2015), this category of technique "offers a work procedure that specifies how to get from current process insights (As-Is) to concrete improvement ideas (To-Be) but lack any guidance regarding the kind of process alternatives that need to be considered".

Moreover, when process improvements are implemented it is necessary control them, by measuring their performance (efficiency and effectiveness) through KPI's. Dumas, M., La Rosa, M., Mendling, J., & Reijers, H. A. (2013 as cited in Van der Aalst et al., 2016) comment that KPI's "are quantities that can be unambiguously determined for a given business process, assuming that the data to calculate this performance measure is available". And the most adequate KPI's are the ones that connect the process with the strategic objectives.

#### 2.3.1 BPM life cycle

The transition for a process management approach requires more than focus on the processes themselves, as explained by Burlton (2010, as cited in de Morais et al. (2013), "it is important to validate strategic direction, determine the relationship between stakeholders, develop process architecture, align process governance, prioritize processes for change considering all stakeholders, align capacities with people, technology, installations and, finally, establish a transformation portfolio".

De Morais et al. (2013) define BPM life cycles as "models that systematize the steps and activities that should be followed for running BPM projects". They also mention that ABPMP (2009) define a BPM life cycle that comprises managerial practice in BPM in six steps: planning, analysis, design and modeling, implementation, monitoring and control and refining.

Moreover, there are many different BPM life cycles models in the literature review. Houy, C., Fettke, P., & Loos, P. (2010) state that "although the number of steps and nomenclature used varies greatly, conceptually, cycle steps do not present fundamental variations and are normally just divided differently".

Extracted from de Morais et al. (2013) research, the main models of BPM life cycles among hundreds of papers analyzed by these scholars are listed in the Table 1 below:

Table 1: Life cycle Models (adapted from de Morais et al., 2013)

Van der Aalst (2004)	Process design; 2. System configuration; 3. Process enactment; 4. Diagnosis
The Netjes et al. (2006)	Design; 2. Configuration; 3. Execution; 4. Control; 5. Diagnosis
Weske (2007)	Design and Analysis; 2. Configuration; 3. Enactment; 4. Evaluation
Hallerbach et al. (2008)	Modeling; 2. Instantiation/Selection; 3. Execution; 4. Optimization
Houy et al. (2010)	Strategy development; 2. Definition and modeling; 3. Implementation; 4. Execution; 5. Monitoring and controlling; 6. Optimization and improvement
	Goal specification and environmental analysis; 2. Design; 3.
Zur Muehlen and Ho (2006)	Implementation; 4. Enactment; 5. Monitoring; 6. Evaluation
Verma (2009)	Definition of organization objectives; 2. Processes identification; 3. Processes classification; 4. Process selection; 5. Tools definition; 6. Implementation; 7. Monitoring

Although the variety of models existing, with different levels of detailing, it can be noticed that the model chosen to be used depends on the context of the organization, its business model and the type of process involved. In some models the "optimization and/or improvement" phase is explicit and can be understood as the process redesign. For models that do not mention it, the last phase of diagnosis or evaluation actually starts the process of identifying opportunities for improvements and then the cycle is restarted, this time seeking innovation in the existing process.

#### 2.3.2 Business Process Model and Notation (BPMN)

The modeling phase of BPM life cycle implies in interpret the process through a graphical format, the notation, that demonstrates its organization in terms of flow of tasks and relation between tasks, as well as information exchanged during the process. As defined by ABPMP (2013), notation "is a standardized set of symbols and rules that determine the meaning of these symbols".

Yet, ABPMP (2013) defends the use of notations standards to represent a process due to notations facilitates the "communication among people, provide consistency in form and meaning of the models, allow import and export of models among different tools, and enable generation of applications from process models".

Among the various existing notations, applicable to different types of contexts and purposes, Business Process Model and Notation (BPMN) is applicable in complex processes, easily understandable by different audiences and recommended to modeling key-processes. As explained by Owen & Raj (2003) "BPMN specifies a single business process diagram, called the Business Process Diagram (BPD), which is easy to use and understand, as well as offers the expressiveness to model very complex business processes".

BPMN comprises four main categories of elements: the flow objects (gateway, event, activity), connecting objects (it connect the flow objects through arrows of different types and purposes), the Swim lanes (it specifies a function or a process actor, represented by a rectangle, in which their flow objects represent a part of the process performed by that function or actor), and the artefacts (symbols that represent additional information about the process, about the activities, such as data object, data store).

After analyzing concepts, resources, structure and methods used in application of BPM approach in a company, it is deemed that BPM, as a set of practices that lead to the efficient and integrated management of business processes, provides possibilities of combinations and multiple uses of the various methodologies and techniques existing in the field of Management, even because the core of BPM involves process management in a broad context, covering the people involved, the necessary and/or opportune technologies, the external (market) and internal (organization) context, which ensures more assertive and possibly lasting analysis and restructuring.

#### 2.4 Innovation

It can be inferred that innovation in the organizational-market context involves generating a new idea applied in the organizational environment in order to improve a deliverable (process

or final) generating more value to the final product, or to the commercialized service. Furthermore, is "a necessity for firms that compete in environments where change is pervasive, unpredictable, and continuous" (Brown, S. L., & Eisenhardt, K. M., 1997, as cited in Koberg, C. S., Detienne, D. R., & Heppard, K. A., 2003).

Innovation is classified by various aspects, but one of the most used is the level of complexity of the changes. In this sense, there are two main categories of innovation: incremental and radical innovations. Tushman, M. L., & Romanelli, E. (1985, as cited in Koberg et al., 2003) defined "incremental changes as those that encourage the status quo, whereas radical changes are those characterized by 'processes of reorientation wherein patterns of consistency are fundamentally reordered'. In addition, "radical innovations encompass higher order innovations that serve to create new industries, products, or markets" (Herbig, 1994; Meyer, Brooks, & Goes, 1990, as cited in Koberg, C. S. et al., 2003)

Incremental innovation is more usual and easier to be implemented due to its level of complexity be lower than the radical innovation, usually demanding changes implemented in short or medium term its performance "entails the refinement and reinforcement of existing products, processes, technologies, organizational structure and methods" (Chandy & Tellis, 1998; Dosi, 1988; OECD, 2005 as cited in Forés, B., & Camisón, C. 2016).

However, for some authors, both types of innovation must coexist in the companies, as mentioned by Farjoun (2010); He & Wong (2004); March (1991); Probst & Raisch, (2005, as cited in Forés et al., 2016) "firm's survival and generation of economic rents is explained by its ability to obtain both incremental and radical innovation performance, for which a balance between the two is required".

How service firms can innovate considering the distinctive characteristics of services (intangible, heterogeneous, perishable and inseparable from production) is a challenge for researchers and organizations. Michel, S., Brown, S., & Gallan, A. (2008, as cited in Skålén, P., Gummerus, J., Von Koskull, C., & Magnusson, P. R., 2015) argue about a different approach and meaning of innovation in a service design logic (S-D logic) explaining that "from the S-D logic perspective, the definition of innovation work must change from focusing on 'he production of innovative products to resource integration and enhanced value propositions".

Moreover, in other research (Michel et al., 2008, as cited in Patrício and Fisk, 2013) addressed the difference of thought and subsequent actions necessary to the service innovation process. The authors alert that "innovative services are not defined in terms of their new features, but in terms of how they change customer thinking, participation and capabilities to create and realize value". Service innovation, in this sense, "is the creation of new and/or improved service offerings, service processes and service business models" (Ostrom et al., 2010 as cited in Patrício and Fisk, 2013).

Considering the benefits of innovations in service, the economic gain of an innovative construct is the relevant issue for the companies. However, as stated by Witell et al. (2016) even if a new service creates significant benefits for customers, the service might not generate revenue to the developer. Additionally, there is a growing trend for innovations that others can use free of charge, where the benefit for the developer is the intrinsic enjoyment of creating and peer acknowledgment, rather than monetary value (von Hippel, 2005, as cited in Witell et al., 2016).

#### 2.5 Information management

Information management is a challenge as well as a necessity for achievement of defined strategies and organizational goals, since, as suggested by Ragu-Nathan, B., Ragu-Nathan, T. S., Tu, Q., & Shi, Z. (2001), world has faced a transition from an industrial economy to an information economy, where information – rather than land and capital – will drive the creation of wealth and creativity.

In a more technical perspective, according to Earl (1989, as cited in Ragu-Nathan et al. (2001), an information management strategy refers to management of the entire information systems function. In his other words, it is the management framework which guides how the organization run information system and information technology activities. And, in order to certify the whole comprehension, he also explains the concepts of Information System strategy – that deals with information systems applications – and Information Technology strategy, which deals with the technology used for delivery of application systems.

Strategically conceptualizing information management, it can be mentioned Davenport e Prusak (1998, as cited in Belluzzo (2017) that define it as "a structured set of activities that include how companies obtain, distribute and use information and knowledge". Yet, Lopes and Valentim (2010, as cited in Belluzzo, 2017) regarding the information management objectives mentioned that "information management aims to support the management of organizations through processes that bring efficiency and accessibility to information and its articulation in various areas in order to facilitate the creation of knowledge".

From another strategic point of view, Scholes, K., Johnson, G., & Whittington, R. (2002) allege that improvements in information processing capability (through information technologies and information systems) can improve and assist the way in which knowledge is created and shared both within and around an organization. For the same authors, information relates to strategic aspects in terms of capability, and to the impact of Information Technology (IT) and Information System (IS) developments on core competences; changing business models within and across industries and sectors, and; structures and management processes.

Analyzing information management implications for organizations, Ponjuán Dante (2004, as cited in Belluzzo, 2017) point out that information management also brings the need for mastery over aspects such as: knowledge of the different types of information used in the organization, the dynamics of its flows, the information life cycle and people's knowledge about the relationships they establish with information.

#### 2.6 Information technology and Information system in BPM

"Process organization seems a promising way to overcome functional silos that can create barriers to effective information flow, constrain the value that can be generated by the enterprise and can also lead to isolated systems development" (Gibb, Buchanan, & Shah, 2006, as cited in Trkman, 2010).

In order to make this statement possible, IT and IS are some of the most used resources by companies seeking greater efficiency, but also, quality and innovation, by easing communication, executing and controlling processes, fostering innovation though new services and products. In short, "IT provides a bigger pool of knowledge by connecting different actors

especially in collaborative networks and knowledge learning organizations. Thus, it is arguable that IT provide means for organizations to be more innovative" (Dewett, T., & Jones, G., 2001).

In the BPM approach, technology is usually mentioned as a key-resource to be used in different parts of the cycle, not only for providing new solutions to the firm itself, but used during the BPM process, for instance, the software and tools support for process modeling, gathering and analyzing data. As mentioned by "Information system development can often be addressed as a BPR practice, either because it automates some human-based processes or because it replaces an existing legacy system" (Grau, G., X. Franch, et al., 2008, as cited in Akhavan, A., 2015).

It can be seen in the literature that it is a frequent mistake of many organizations regarding the use of technology as a resource that will guarantee the improvement of their organizational performance, but in fact, and as already seen in the concept of BPM, the necessary approach is integrated , which includes information technology as one of the resources that support the optimization of processes, however it is not essential in certain business models. The set of definition of a business model with well-defined strategies, structure and resources, and an accurate analysis of its processes are the most important and most susceptible factors to be responsible for the success of innovations.

#### 3 PROBLEM CHARACTERIZATION

This chapter addresses the current characterization of the company by analyzing its business model, in addition to its current organizational structure and processes map that represents the company's systematic functioning. Based on such information, and through applied data collection techniques, the existing problem is also presented, enabling the definition of the process to be revised and the subsequent analysis of its current situation (As-Is), which is the basis for the solution proposed in this research.

#### 3.1 Company business model

Market Access has been in the market for 15 years, founded in 2005 by two Portuguese partners and a Chinese partner. The consultancy's focus since its creation has been to support the internationalization of organizations, covering a broad, integrated and flexible portfolio of services made available according to the client's needs.

The company's mission is to support to companies and other organizations in addressing foreign markets, by building alongside the customers a path of success in the global marketplace. In other words, its business model involves offer services for enabling and/or supporting the internationalization of business-to-business (B2B) clients around the world, with structured services managed as projects. As mentioned before, the nature of Market Access business demands, at the same time, a large portfolio of services and a high level of customization offered, in order to meet the client expectations.

Nowadays, the main customer segments attended by the consultancy are private companies, associations, city councils and educational institutions. Its services comprise the entire internationalization cycle, which steps follow below:

- 1. Diagnosis: it comprises internal and external analysis services, benchmarking, market studies, selection of priority markets;
- 2. Strategic Marketing Plan: it includes the development of an international marketing plan, identification of entry barriers, commercial strategy for market approach, training and coaching;
- 3. Market Development: it integrates potential partner selection activities, partner promotion, trade missions, fairs and international events;
- 4. Management of the company in the market: it involves the direct participation of an area manager in the management of operation in the new market, also commercial representation and consultancy on financing in the foreign market.

Since the company offers individual services (each step described above) or the full support in the internationalization cycle (the four steps together) it represents a differential for the company in the consulting segment. Likewise, Market Access has clients from different sectors of the economy and in several foreign markets, which guarantees an expressive know-how acquired throughout the company's existence, being an added value and a competitive advantage in relation to its competitors.

One of the strategic objectives defined by Market Access include the expansion of its influence abroad and development of a portfolio of international customers. Because of this, the firm has

expanded its focus to potential markets and opened a branch in Brazil in 2019. The basis of organizational strategy to provide ideal solutions for customers with excellence is:

- Consolidation of internal competences, through the implementation of a management system and qualification of its resources
- Strengthen the team in existing markets and expand the partner network in new markets
- Advance of the Market Access internationalization process, with an increase in international customers in order to enhance the brand in the international market.

Besides these guidelines, a SWOT analysis of Market Access (see Figure 2) was reviewed and updated, based on the existing analysis in the company's Management Manual, highlighting the current internal and external main aspects of the company that guide their actions. This analysis enabled the detection of company's strategic position in the market, mainly the internal weaknesses, helping the researcher to understand the company's "pains", which would guide the interviews and the data gathering. From this standpoint, it was observed that human factors – such as communication, culture and skills – are critical issues, as well as the operational aspect of project management, that even the company having a management system, there are always opportunities for improvements.

	Multicultural team	Organizational inconsistency	
٠,	Competitive price	Lack of specific technical skills	
토	Know-how / Experience	Internal communication	ESS
S.	Network / Countries	Human resource turnover	Ë
STRENGHTS	Internal processes, methodology	Project management	WEAKENESSES
S	Teamwork	Multicultural team management	>
	External communication		
	Portugal 2020	Increased competition	
ES-	European and international funds to	Decrease in European funds	
Ξ	support internationalization	Weakening of the consultant's image	TS
ΙÈ	Portugal brand in the world	Lack of cooperation from customers	THREATS
OPPORTUNITIES	External communication - Social networks	Economic instability	푸
О	Need for internationalization of	Technological changes	
	companies		

Figure 2: SWOT Analysis – Market Access

Currently the organization has 15 effective employees, mostly allocated at the company's corporate headquarters (Porto) and 2 allocated in strategic countries for the company. Besides its employees, the company's operation requires a massive network and partnerships for enabling the excellence of the consultancy's work. Market Access then count on partners in Portugal and around the world that provide specific services in markets or in business issues/areas that Market Access needs some support to develop its projects.

The cultural factor is significantly important for the company, since the nature of the business encompasses dynamism, strong communication and expertise. For this reason, there is a great incentive for training, knowledge and experiences exchange, as well as a strong sense of community, multiculturalism, respect and welcome, seeking to assure the uniqueness and strengthening of the team, reducing the cultural differences and the physical distance effects.

Regarding internal processes and use of defined methodology, Market Access adopts a process-based approach for its management system, governed by the ISO 9001: 2015 standard, certification that has been adopted since 2016, which defined the substantial processes and their relations, defined the Management manual, also counting on the supportive use of standard procedures and documents.

In an effort to greater analyze the organization environment, two enterprise level models were detailed below: business process mapping and organizational chart.

#### 3.1.1 Business Process Mapping

Market Access adopts a process-based approach for its management system, governed by the ISO 9001: 2015 standard, certification that has been adopted since 2016 by the company, and which has proved to be a real asset to guarantee a systematic management of organizational processes and strategies in order to achieve customer satisfaction and business objectives.

Market Access business processes are grouped into three classes: Management Processes, Operational Processes and Support Processes.

Market Access' Management Manual (2018) was the source for describing the concepts of these macroprocesses. Initially, Management Processes are related to the organizational structure, influencing all other processes and establishing forms of internal action. Its nature should always consider the convergence of the organization with the general objectives defined.

By 2019, this group of processes included "Business Management" and "Management and Improvement Systems". In 2020 it was created the "Innovation" process and added to this class of management processes.

- Business Management Process: it is related to the definition of strategic objectives and
  the activities and actions required to achieve them, ensuring that the organization's
  structure is aligned with the requirements of different stakeholders, in a perspective of
  value creation;
- Management and Improvement Systems Process: aims to define, implement, maintain
  and improve the operational and effective Quality Management System (QMS), in order
  to satisfy the needs and expectations of our customers and other stakeholders;
- Innovation Process: it aims to continuously develop new methodologies and new solutions that, at each moment, better suit and anticipate the needs of customers and markets. It also intends to promote new ideas that reinforce internal processes.

Operational Processes, on the other hand, are directly related to the organization's core activity, being oriented towards the market and operations. Therefore, they are the core processes of the company.

- Market Process: it refers to commercial activities which goal is increasing the
  company's participation in the market through the search for customers and
  consolidation of service proposals, as well as the relationship with the clients throughout
  the project in order to ensure their satisfaction and the excellence of the service.
- Operation process: it concerns the planning, execution and control of the internationalization projects contracted by the clients.

Finally, the Support Processes role is to assist all other processes and they are essential for the smooth running of the organization, with a supportive nature and a more internal component.

• Internal human resources management process: it involves the development and management of employees, the development of skills, performance evaluation, health, hygiene and safety;

- National partners network management process: it develops and maintains the network
  of national partners suitable to the requirements and expectations of projects and
  customers;
- International network management process: with the same objective of previous process, it develops and maintains the network of international partners adequate to the requirements and expectations of projects and customers;
- Administrative and Infrastructure Management Process: support to the company's
  operation, providing the necessary physical resources, as well as it is responsible for the
  management and administrative control of all support activities, including
  communication and maintenance systems and asset management;
- Information and knowledge process: its goal is maximizing the business potential in operational areas (Market and Operations), through an effective and efficient information management and produced knowledge, either by the history of projects or by the joint knowledge of the company's employees.

In order to better visualize the interaction among all the processes of Market Access, it was developed its business process map, represented in Figure 3. As explained by Stoneham (2015, as cited in Araújo, M. B., & Gonçalves, R. F., 2016), the mapping process of an organization is the knowledge and the analysis of its processes and data interconnection, and it is structured in a top-down design (from the top of the organization to the base), to a level that allows a thorough comprehension of products, services and results.

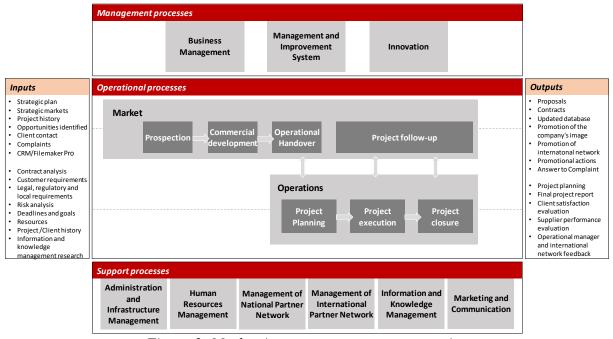


Figure 3: Market Access current process mapping

Likewise, the process management model was defined in accordance with the business processes of real added value to the organization, with the current organizational structure and the nature of the company's activity organized by projects, supported by the project management methodology, which life cycle consists of five processes: Start-up, Planning, Execution, Control and Closure.

Together with the detailing of the processes, it is necessary to identify their respective performers and roles. As this research is focused on the core (operational) processes, the functions related to the Market and Operations processes are presented below (see Table 2), in accordance with Market Access Functional Descriptions documents.

Table 2: Functions and roles in the core processes (Market Access, 2018)

Tab	ole 2: Functio	ons and roles in the core processes (Market Access, 2018)
Process/Area	Function	Roles
Market	Market Manager (CCO)	Definition of the company's commercial strategy Identification of trends and new business areas Plan and development of concrete action proposals for different market areas Ensure coordination of activities and commercial teams Business risk assessment and control Definition and development of communication strategy and policy Ensure the sharing of information and knowledge Develop and update performance indicators.
	National/ International market managers	Global management of national and international customers Analysis and prospecting of national and international markets Development of commercial leads Scheduling and holding business meetings and presentations Costing and technical design of commercial proposals, for national and international entities Development and presentation of proposals, budgets and sales conditions to national and international entities
	Commercial	Development of commercial leads Preparation, submission and follow-up of proposals Billing planning Management and maintenance of commercial documentation Preparation and coordination of project launch meetings (APQP) CRM management and maintenance
	Client manager (CM)	Monitoring the development of projects and managing customer relations Contract requirements and customer expectations management Regular feedback with Project Manager and client Mediation of conflict situations, latent or real, with the client Customer representative, ensuring your satisfaction Customer loyalty
Operations	Operations manager (COO)	Global management of operational resources Globally manage and control the development of all ongoing projects Permanent capacity analysis and study Globally manage and control the production of all operational documents Design and development of new services Ensure the assessment of customer satisfaction, during and at the end of projects Develop and monitor operational performance indicators
	Business Unit Managers	With Operations Manager, plan all the resources and activities necessary for the development of projects  Control and support the Project Manager in the development of all phases and activities of the different projects  Periodically communicate to the Operations Manager the status and evolution of the projects  Ensure the production of operational documents
	Project manager (PM)	Define and manage the overall project planning (objectives, schedule, milestones, deliverables, etc.)  Project introduction in Enterprise Resource Planning (ERP)  Ensure that resources (internal employees, network of national and/or international partners) are aware of the objectives and their functions, managing and controlling the evolution of activities and the smooth execution of the project  Support the project implementation team  Identify and solve the main problems

	Manage the changes that were approved during the development of the
	project
	Proactively disseminate information about the project to stakeholders
	Identify, manage and mitigate project risks
	Regular coordination meetings with the implementation team and steering
	with the client
	Direct communication with the client to streamline all issues related to the
	project
	Periodic reports
	Project closure
	Execution of all project activities, reporting to the project manager
Consultant	Meet planned times and activities
	Database creation, presentations, emailing, translations, business contacts etc.
	Planning, organization and monitoring of market trips
	Record the allocation of time spent on implementation

In terms of service offerings, Market Access is organized into the following business units (BU's), which represent the segments of the operational area, classified by type of customer segments (public and private entities) in cases of more customized and/or broader projects, and also by type of service, in case of more specific and/or standardized services ("Knowledge & training" and planning)). In this structure there is a manager for each BU.

- Private entities business unit
- Public entities business unit
- Knowledge & Training business unit
- Planning business unit

#### 3.1.2 Organizational structure

Once the processes structure has been described, it becomes easier to understand the company's organizational architecture. Nowadays, Market Access is structured in a matrix-based model, as shown in Figure 4, with a business process approach and, as explained in the Management Manual (Market Access, 2019), this model promotes interaction between the organic units, ensuring efficiency in the use of their means and resources. The entire organic structure of Market Access reports directly or indirectly to management members.

The Market team has been divided by geographical operation, which means, into National and International segments. Similarly, and as mentioned above, Operations area is divided by business units in order to optimize the use of resources among the projects.

The newly created Innovation process comprises three different areas of Service and process innovation, Digital transformation, and Knowledge transfer. And Marketing and Communication process used to be part of Market process until 2019, being both modified for strategic reasons of the company.

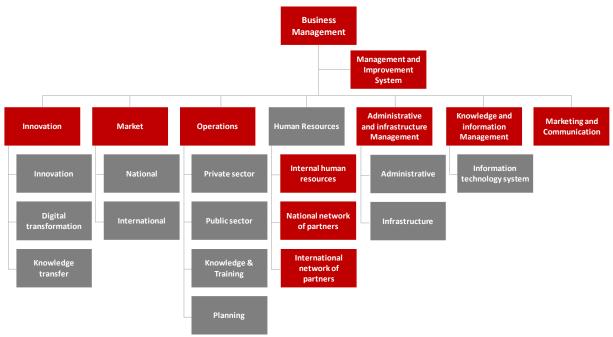


Figure 4: Current organizational structure of Market Access

Complementing the analysis of Market Access' organizational architecture, the functional organization of the roles and hierarchy in the company is presented below in Figure 5:

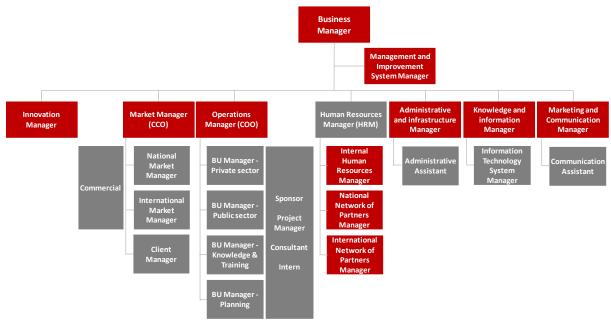


Figure 5: Current functional structure of Market Access

#### 3.2 Existing problem

The current scenario of business expansion and the unrestricted focus on the customer has required a greater effort by Market Access to meet the different needs of its clients in a structured, coherent and strategically viable way. Several technological, economic and cultural innovations have been constantly emerged, and Market Access has sought to update and adapt its services and processes to the new reality. However, there are natural challenges faced to accomplish the excellence and viability of the services provided, for example:

- Complex scope of the project (several sectors involved, different markets, etc);
- Existence of data for study;
- Legal/political barriers of information access;
- Innovative product or service, with no history, which can make it difficult the analysis of potential markets and their entry strategy.

In this sense, the company's growth has demanded agility and quality of information to provide efficient analysis and solutions. This has required focus on information management, which include the means of information collecting, analysis and sharing. Such information can be originated from the company's employees (know-how), external sources (partners, outsourced and customers), company's database itself, scientific information available from reliable sources (documentation, periodicals, scientific community, public entities) etc.

Besides the external challenges mentioned above, internal factors were identified during the Exploration phase with the purpose of comprehending which internal and customers issues are affecting the quality of the services, and it comprised of observations, interviews and documental analysis.

First analyzing customer needs and/or complains, the data source used was obtained from employees' opinion during the interviews and from company's customer satisfaction survey carried out with clients at the end of projects in a total of 34 surveys analyzed that were submitted in the period of 1 year, from Mar/2019 to Mar/2020. From the satisfaction survey it was possible to conclude that 97% of clients were satisfied with service provided by the company, proving that customer dissatisfaction is not a critical problem but how the company can improve existing failures to more efficiently meet customers' needs so that their expectation are surpassed. The problems stated by both clients and employees were:

- Misdiagnosis of customer needs
- Misalignment of objectives and scope
- Lack of project plan document to the client
- Communication failure with Market Access team during the project
- Delay in receiving proposals
- Delay in task execution during the development of the project
- Lower quality of diagnosis about target-market during the development of the project

Regarding internal problems mentioned by employees, the most cited ones are listed as follows:

- Lack of standardization of the means of gathering, registering and using relevant information by the team;
- Failure to communicate information among sectors, resulting in loss of quality and/or wrong scope definition;
- Excess documentation, containing data and forms that are not intuitive in terms of filling and analysis;
- Important decisions throughout the project without responsible and procedures defined;

• Qualitative and intuitive information about the client not considered and/or registered inappropriately in the initial prospecting phase, generating loss of important information for the scope of the project and for the internal information handover.

One of the main problems cited refers to the lack of a structured procedure for gathering and analyzing information, the absence of tools to support the execution of such activities and the way of communicating information internally and externally. An ongoing action in this field is the digital transformation in progress in the company, by the implementation of a relational database to be used by the Market and Operations areas, which is being implemented and it tends to streamline the access to prospect and history data.

However, in addition to the technological tool, it is important to highlight the human factor, referring to the need for discipline and accuracy in recording data and information, so that it is possible higher quality of the information used by the teams.

It was also identified that the failure in information transfer between Market and Operations teams is used caused by lack of a defined procedure for transferring information, resulting in loss of relevant information to the project and increasing the risk of failures in the project planning and execution, rework and lower value service to the client.

This is also related to the previous failure mentioned, regarding the inefficient collection, registering and analysis of data and information at the beginning of the productive process, in the prospection phase, resulting from the meeting between sales consultant and customer. This issue is also observed during the execution of the project, when there is an inefficient communication among client manager, client and operational area.

In the same way, this is directly linked to the difficulty and time-consuming activity of filling out the existing documentation by the Market and Operations areas, whose information is dispersed in different forms and places, which also influences the neglected filling of the documents, and leads to the loss of valuable information for project development.

Besides that, the way of recording such information – MS Excel forms – facilitates the occurrence of errors in filling, editing and/or deleting data. Besides that, repetition of filled data in different documents is a recurring complaint among employees. It was observed that such means of registration are no longer satisfactory for the current dynamics and needs of the team.

As a result of the flexibility and agility required in many projects, whether due to time demand or because they are ordinary and simple projects without the need to perform all the steps and activities of a standard project, it was also found that some processes had to be adapted in order to speed up the project's progress.

#### 3.3 Stakeholders and requirements identification

In order to direct the problems selection, it was necessary to identify the main stakeholders involved in and how they influence Market Access services. The Power-Interest matrix shown in Figure 6 was adapted from the company's Management Manual (2018) and it highlights employees, customers, shareholders and network of national and international partners as the most influencing and interested stakeholders, demanding greater effort of the company to manage their needs and expectations.

Therefore, the present research must focus on the identification of problems and propose solutions that primarily satisfy the needs of these players, also supported by the requirements raised from the top management to guide the generation of ideas.

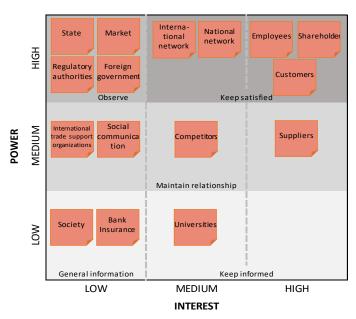


Figure 6: Market Access' stakeholder matrix (Market Access, 2018)

Assisted by a requirements traceability matrix, the priority requirements to this study were defined.

- 1. Focus on increasing value provided to the customers;
- 2. Low cost solutions;
- 3. Short term applicability solutions;
- 4. Improve communication;
- 5. Better information management and knowledge transfer among the team;
- 6. Solutions must be integrated to the company's management system;
- 7. Automation of tasks to promote and foster the digital transformation in the company;
- 8. Suggested improvements/innovations must be applicable to all professionals involved in the redesigned process, considering their different cultures, languages, areas of knowledge.

#### 3.4 Process selection

With the list of issues identified, the requirements and main stakeholders involved in the improvements, it was possible to analyze patterns of needs and opinions, and a summary of the problems was taken to the top management for analysis and considering data gathered and the priorities for the organization, Market process was chosen to be studied and redesigned. It was determinant for the decision the fact that this process encompasses a large part of the root causes of the most critical problems, such as the lack of a correct commercial diagnosis, which culminates in subsequent communication failures, reworks, failure to define project scope and weakening of the customer relationship.

Also, there is a critical "pain point" to be solved that directly involves the client: Market persons are the ones that most contact the client throughout the entire productive process, so that it is extremely important to minimize negative effects and impacts in their relationship. Yet, Market process is quite complex, with plenty of interconnections with stakeholders and other processes, as well as technological tools and different resources needed to perform the whole process.

#### 3.5 Analysis of the current process (As-Is model)

To begin the As-Is analysis, Market process was depicted through a multi-level process modeling method, which implies in three different levels of process detailing. This method was chosen due to the process complexity, facilitating the understanding and detection of existing gaps when the process is firstly studied in a broader view, called 1<sup>st</sup> level model, in which its phases, main activities, responsibilities and outputs generated are analyzed and represented in a diagram.

The 2<sup>nd</sup> level model consists of detailing the process' phases into the level of tasks of each main activity, by designing flowcharts. For this methodology, it was defined the functional flowcharts, the swim lanes charts.

For the current situation analysis, it was not possible to analyze the 3rd level, regarding the existing work instructions of each activity. Market Access does not have this type of document for all activities, and after the search made in this documentation, it was found that there is only a single work instruction belonging to Market process. Thus, the As-is analysis was carried out until the second level model, then it was possible to select the most critical gaps with potential to be improved according to the requirements of the project.

#### 3.5.1 1st level model – Phases of the Process and its Responsibility Matrix

Based on a careful analysis of the process fact sheet (APPENDIX B) and the functional descriptions of those who execute and are involved with the Market process, it was possible to elaborate a Responsibility Matrix of the current scenario.

Initially, the activities of Market process were identified directly in the existing Market process fact sheet (APPENDIX B), which are: Market Analysis, Commercial Prospection, Customer Order Management, Technical Design of the Proposal, Proposal Follow-up, Proposal Approval/Contract, Project Handover and Project Follow-up, and they are graphically represented by Figure 7.



Figure 7: Activities of Market Process - Market area

For purposes of adapting to the multilevel process modeling, it was necessary to group them into phases, defining them as Prospection, Commercial Development, Operational Handover, and Project Follow-up.

Prospection: it refers to market analysis and commercial prospecting activities. Market
analysis is carried out by different areas (Market, national and international partner
network) searching for markets, segments of the economy and entities (public and

private) with the potential to be explored by Market Access. This analysis is driven by the strategic guidelines, needs and opportunities identified in the market, internally or with customers. In turn, the prospecting activity focuses on the initial contact with potential customers, followed by a visit/meeting to present the company and look for business opportunities;

- Commercial Development: its activities are Customer Order Management, Technical
  design of proposal, Proposal follow-up, and Proposal approval. In other words, it is a
  concretion business-oriented process, from the study of the customer needs and the
  means to meet them through a service proposal, negotiation and ending with the contract
  approval;
- Operational handover: originally this phase was classified as an activity, but due to its
  complexity and importance it is reclassified as a phase, containing two main activities.
  This phase embraces the communication of the project scope from the Market team to
  the operation team, that will develop the project (Information handover meeting), and
  the official launch of the project with the client, through the Kick-off meeting (KOM);
- Project follow-up: like the previous phase, this one was also reclassified as a phase because it has several important tasks, which can be grouped into three main activities: Client information, Complaint resolution and Project closure follow-up. This phase therefore takes place from the execution of the project, led by the Client Manager (CM), who monitors the development and closure of the project, appraises its quality and manages the needs and expectations of the client throughout the project.

The suitable change in the classification of "Operational handover" and "Project follow-up" activities, as well as the whole view of phases and their respective activities is shown below, in Figure 8.



Figure 8: Market process hierarchy

As can be noticed, Market process is not limited to the sales activities, but it follows the entire project path, end-to-end, through the CM by ensuring the client's needs are met until the project is completed. Likewise, different internal and external actors participate of the process, standing out the transversal and interdepartmental nature of the activities and the use of the resources. So, it was necessary to identify the actors involved in each activity and the type of role (responsible, informed, consultant) they play in the different phases of the process, as well as what are the deliverables of each activity, which also represent the input of the following phase and that it can be represented by documents, actions, decisions. For this purpose, it was developed a responsibility matrix, presented in Figure 9.

The fact sheets and the functional descriptions of Market and Operations processes were the basis for the identification and allocation of those responsible for each activity inside the company, as well as their outputs. However, the process fact sheets do not present information on those responsible for the activities by function, but by organizational area. This is an

important characteristic of Market Access business model and a restriction for the development of a more detailed responsibility matrix.

Although the functional description documents present the list of main tasks of each function, what it can be observed in the company operation is a multi-functional performance by some employees (especially in the operational processes). In other words, the functional structure was defined in a long-term perspective of growth of the company, implying in a necessity of detailing the roles in different functions. Furthermore, analyzing the functional descriptions of Market area, some roles must be played by more than one function, what ratifies the difficulty of defining the players of each activity.

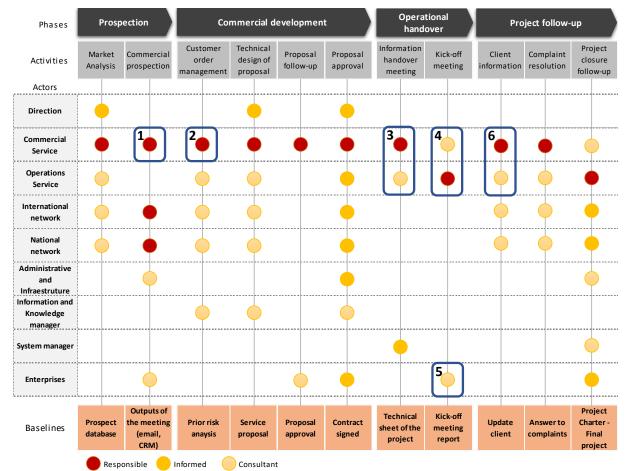


Figure 9: Market Access' As-Is responsibility matrix

In section 3.5.3 (Identification of process gaps and opportunities for improvement) below, some gaps were more precisely detected in the process, which are highlighted and enumerated in the responsibility matrix.

#### 3.5.2 2nd level model – Process Swim lanes

According to its management system, Market Access adopts a model for detailing its processes, in descending order, as follows: 1 - Processes (overall processes map and process fact sheets); 2 - Procedures, and; 3 - Work instructions. In this context, the procedure document represents the second level model, however, it was observed that this existing documentation does not integrate all activities, which means, there are separate documents for each activity and there are procedures designed just for some of them, preventing a complete view of the process in a

single graphic with all stages. Besides that, the simpler flowcharts designed can hamper an easier identification and relation among the actors.

Once this deficiency was detected and after the responsibility matrix analysis, it was developed the process drill down into tasks, in form of functional flowcharts, the Swim lanes charts, in order to better understand the current process and identify the points of failure that can be changed or improved. To illustrate them, four charts for each phase were designed, and are exhibited in APPENDIX C to F.

In APPENDIX C, the Prospection phase drawn indicates Commercial service (without definition of the task "owners") and Network partners both responsible for the activities for Market analysis and Commercial prospection, but the partner does not is responsible for update the company database, and when they have a meeting with enterprises, Market Access is informed by email in case of success in the first contact, and the partner passes the contact's follow-up to the consultancy.

The Commercial development phase, which swim lane is presented in APPENDIX D, happens when there is possibility for keeping the contact with the customer and is noticed a great need for communication between Market and other areas and stakeholders in order to get information to help them in the initial diagnosis and in the proposal design. Proposal follow-up and Proposal approval are quite standardized in terms of procedures and sequence.

The Operational Handover phase is critical in the process, demanding quality of information and great communication to transfer all information about the client and objectives, and later during the Kick-off meeting. It can be noticed this phase presents lots of forms to be filled in and even though the issues regarding time consuming and/or unnecessary meetings are not highlighted in the process diagram (see APPENDIX E), they should be considered in the gaps.

With the project defined, the execution of the project by the Operations team starts and the swim lane of the Project follow-up, exhibited in APPENDIX F, and the main actor is the Client Manager, that actually needs to receive, analyze and transmit information constantly, beyond the management of conflict and complaint with client and internal team. Due to the lack of a defined sequence of tasks for this follow-up, it was considered that, in the called "Client update", Client manager only receive official and structured information about the project when Operations updates information for the steering meetings. There is not an established procedure to identify how the contact with the client is performed.

This phase follows with the structured Complaint Resolution activity, supported the Customer complaints management Procedure, pointed out in the swim lane. In the project closure, Client manager is informed about the project results, but plays a supporting role, many times missing a more active performance in order to demonstrate commitment to the client.

#### 3.5.3 Identification of process gaps and opportunities for improvement

After analyzing the stakeholder requirements, the list of internal problems identified, actors' responsibility in the As-Is responsibility matrix and customer "pain points" highlighted during the initial data collection, several "pain points" were found in six activities, which have impacted the quality of service delivery and the value perceived by the customer. These process gaps are highlighted and numbered in the responsibility matrix above.

Initially, in the Prospection phase, it was highlighted (gap 1) the need for improvement in gathering information from the client, both technical and intuitive ones. The Market team is responsible for this meeting and knowing that each customer is unique, with their own culture, characteristics, goals and expectations, it is essential that the Market people be able to recognize the client's "style" and can approach them in the most appropriate way, in order to capture as much information as possible. Currently, there is not an strategic guideline as to the type of questions to be asked by the consultant to the client, so that the first meeting can be productive enough to set up a concrete overview of the company and its needs, which is going to be used later in the development of a proposal.

This leads to **gap 2**, in the Customer Order management activity, when Market person analyze the customer's needs and expectations, as well as the commercial risks of a (possible) future project. Without assertive information, the efficiency and effectiveness of the analysis can be hindered, that is, delays and low quality of its content.

Regarding **gaps 3 and 4**, when the contract is signed, a critical activity is preparing and carrying out the information handover from Market to Operations team, and it is likewise the Kick-off meeting issue. However, it could be verified through the interviews there are usual projects with a more standardized scope and methodology usually applied. People from Market and Operations area are emphatic in affirming that is unnecessary to have both meetings, which has affected the productivity of the project, since they all are used to deal with that kind of projects and these two "steps" of meetings could be flexibilized in these cases.

In the **gap 5**, the client's low participation in the process of aligning expectations and project objectives was also evidenced. Although this is the objective of the Kick-off meeting, with the exchange of information between the parties and the collection of any new information to be considered within the scope of the project, sometimes there are still misunderstandings or flaws in the design of the project before starting its project. execution.

Following to the Project Follow-up phase, the main problem verified (**gap 6**) concerns the lack of a structured procedure of communication between Market and Operations areas (namely the Client Manager and the Project Manager) when it is started the project development. Since the CM has the main role of being the representant of the client within the company, which means that the CM should have great communication skills, and be supported by a consistent work procedure to ensure they have all information about the progress of the project on time, thus being able to transmit them to the client whenever necessary.

In a broader management system approach, beyond these specific phased pain points above mentioned, throughout the operational processes (Market and Operations) a remarkable issue that should be considered as a "gap 7", which comprises of the existence of several documents to be filled in different moments of the production chain, that contain information needed for proposal and contract design, handover and kick-off meetings, project plan, etc. Currently, all forms of a project are allocated in the project's folder in the company document system, called NAS. To seek some information, many times it is necessary to consult several files ("Technical definition of the project", "Kick-off meeting report" and "Project charter"), which is a time-consuming task, not to mention the great risk of editing or deleting some data unintentionally.

It is equally important to consider the pros and cons of the matrix functional structure model adopted by Market Access. The flexibility of functions performed by employees is an advantageous factor for the development of projects, since a function can be easily delegated

and/or exchanged among the people on the team, also allowing the development and usage of different skills for all.

However, due to the company's growth and the consequent need for greater specialization of functions, another gap has been identified (gap 8) regarding the definition of standard procedures of some tasks, as well as those specific responsible. For instance, Prospection, Commercial development and Operational handover activities can be performed by (national/international) market managers and by commercial persons, according to the current process sheet. And in some cases, a person can accumulate Commercial, Market Manager and/or Client manager functions, depending on the project.

Indeed, this characteristic of Market Access' organizational model makes the definition of those responsible for all activities of the process more difficult. On the other hand, the current model is still possible and useful for the company's operation, and an increase of "specialization" of functions, in terms of clear definition of tasks for each function, would not be a feasible change to be implemented in the short/medium term.

So, the improvements for this problem must concern the clarification and specification of the responsible for some critical tasks – usually related to process milestones – in order to support the productivity of the project, by easing the communication and avoiding misunderstandings and errors during the project, for example, because of lack of those responsible or, on the contrary, an overstaffing in a same task/activity. And after the entire analysis, the problems with feasible improvements opportunities, and their relations to this project requirements are summarized in the Table 3 below.

Requirements 2 3 7 8 6 Easier Greater Low cost Improve System-Solutions Short-term Task Gap # **Problem** value to technologicommunicainformation integrated applicable customer cal solution tion management solutions to all Lack of relevant information from prospect in the Prospection phase 3, 4 Inflexibility of the process Failure in the definition of project 5 scope (client participation) Low communication during the project follow-up 7 Excess of documentation Repetition of data to be filled in 7 • • different documents Uncertainty of executors and/or decision makers for some tasks

Table 3: List of process gaps to be solved

#### 4 PROPOSED SOLUTION

Once the problems with potential to be improved were identified, it was possible to verify that the current process has three main dimensions of action for its improvement. Brainstorming and benchmarking were the main techniques used to generate possible solutions, which were validated by the process manager.

- Improve internal and external communication through the excellent information obtained in prospection phase, the quality in the information communication during the Internal Handover and the Kick-off Meeting, as well as a clearer definition of the project follow-up procedure, that involves constant communication between the Client Manager and Operations team. The objective of taking communication into consideration as a primary problem aims to mitigate the risk of error in the scope of the project, to improve productivity and good relationship between the parties, and especially to guarantee the delivery of the service according to or above customer expectations;
- 2. Review the process flow, with analysis of the possibility of making some activities more flexible, according to the type and/or complexity of the project, as well as the addition of new tasks, if it is necessary, so that the decision making may take place in a timely manner;
- 3. Optimizing and standardizing the registration and consultation of project documentation in order to guarantee a better information management, which is also a resource that benefits the communication between the parties.

Once defined the feasible improvements, a multilevel analysis of To-Be scenario was also carried out, by the redefinition of the responsibility matrix, swim lanes, work instructions, the performance indicators necessary to control the new redesigned process, as well as the list of adequacy of institutional documentation demanded.

For the purposes of this research, the Market Access organizational structure remains the same, given that it was recently changed according to the new strategic guidelines implemented.

## 4.1 Process redesign (To-Be model)

The redesign of the Market process included changes in the four phases of the process and to support the generation of ideas and validation of solutions, the means used were brainstorming, benchmarking and a systematic considering the requirements initially imposed, which facilitated the organization and selection of ideas, development of solutions and their subsequent validation with the process manager.

Keeping the categorization of solutions described above, the proposals for improvement will be presented within the scope of improving communication, reviewing tasks to improve operational efficiency, and optimizing/automating project management documentation, starting for the last one, which is a component of other improvements explained below.

#### Optimization and standardization of project documentation

Mentioned by employees from different areas, one of the main problems existing is the lack of objectivity in the means of registering and consulting data on projects (gap #7, excess of

documentation and repetition of data to be filled in). To develop a solution for it and amplify the company's digital transformation, the institutional documents were analyzed and verified whether and how its improvement could increase operational efficiency and help the company to generate greater value perceived by the customer during the service provision.

In this sense, it was proposed the replacement of three documents currently used by a single file that gathers the data of the project in a structured and chronological way, which shall be inserted by the stakeholders of both Market and Operations areas, according to the evolution of the service, that is, from prospection phase until the project closure phase, except for the project execution control data, carried out by the project team, because the function of this document is to be like a master plan of the project, where data and information are inserted to be consulted to assist in the analysis and design of the commercial proposal, be a database for the preparation and conduct of Internal handover and Kick-off meetings, project planning and project completion.

In order to structure the file, called Order Directive, the needed information for each stage were firstly analyzed, which of them were repeated, which could be removed so that the fulfilment and analysis time was optimized. Also following the logic used in the initial meeting with the client, this document aims to include this qualitative and high-value information about the client's profile and expectations regarding the internationalization consultancy service.

Additionally, the form of registration and the layout of the information presentation were considered in the generation and validation of the document idea. During the field research, it was identified that the style of traditional forms in MS Excel conveyed the idea of bureaucracy and the consequent tendency of negligence and/or resistance to the correct and complete filling of long forms by the employees, being necessary to create means to simplify the registration of data, in a more intuitive, attractive and direct way.

Therefore, the contents of the file were organized by "chapters" that represent the main milestones of the project, namely: Commercial Prospection, Internal Handover, Kick-off meeting, Project Directive, Project Closure.

Furthermore, the insertion of data must be made in an MS Excel file that has a more "user friendly" layout than the current institutional forms, also containing the explanation and suggestion of content to fill in the fields, in addition to restricting editing and formatting of the data entered, in order to minimize errors and accidental loss of information, as can be seen in the templates of this document in APPENDIX G.

Once the information in MS Excel ("Order Directive data input" file) is filled in, it will be automatically linked to an MS PowerPoint file that will in fact be the Order Directive, which aims to have a more attractive, intuitive and more enjoyable presentation, a single official consultation file for use by all involved and in a presentation format.

The idea of using two different files instead of typing data directly into the MS PowerPoint file is due to the ease of ensuring standardization of the "official" file (presentation format), since it will be filled out by more than one person, needing formatting adjustments on all slides. This would take time and reduce the likelihood of having a fully organized and standardized file.

The need for the sales team to create an Order Directive file arises when an interest and/or business opportunity is identified after the meeting with the customer. In this case, the commercial consultant must create a new folder on NAS system with two new files - Order Directive for data input in MS Excel and Order Directive presentation version in MS

PowerPoint - naming the folder by an identity code (ID) composed by name of the client company + data meeting, and allocating it in another folder "Development of Leads" in NAS document system, which will be available to all involved. When the proposal is developed and the consequent generation of its ID in the ERP, the folder of the Order Directive files must be renamed to the respective proposal ID. If the service is contracted, the Order Directive follows the flow already established in the company, creating a specific folder for the project approved and started at the NAS, where it will be relocated again.

Some templates representing the dynamics of the Order Directive are shown in APPENDIX H.

### Supporting documents to assist the communication with clients

Firstly, in view of the problem presented in the commercial prospecting, it was pertinent to gather good individual practices from the members of the Market team and good practices for diagnosing customer/business needs. For this, an advisory document was created to support business meetings based on the concept of the Business Model Canvas (BMC) and the Value Proposition Canvas, grouping themes, information and possible questions to be asked to the client, in order to help the consultant to carry out an assertive approach for collecting technical and marketing information about the client's business, but not least the qualitative and intuitive information about the client's profile. Thus, the consultant may be able to perform an accurate diagnosis of the client's needs and define which are the most suitable service for that specific case, reducing the time to analyze and submit a proposal.

For a more general understanding of the client's business, the concepts developed by Osterwalder, A., & Pigneur, Y. (2010) of some BMC blocks were used to compose the document, as important themes to be questioned to the client, even in the first contact, considering:

- Customer value proposition: what is client's product/service, what value does it deliver, what is its differential in the market
- Customer segment: to whom the company sells, to whom it intends to sell
- Channels: how to sell, how to communicate
- Key resources: internal structure for internationalization, for example

Based on the concept created by Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2014), from the Value Proposition Canvas tool, this research used it to assist the detailed understanding of the customer's profile (their desires, characteristics and even catch their emotions) during the business meeting, and also to understand how the services offered by Market Access meet this profile.

Bearing in mind the unique and personalized content of a business meeting in the consultancy business model, defining a "script" document for the business consultants is quite challenging, given the numerous types and specificities of potential Market Access customers, in addition to the different skills, culture and personal preferences of approach of Market Access consultants in different markets in which it operates.

Another important factor to be considered is that this "script" could limit the consultant during their work in order to shape then to a pattern of behavior and approach, which is not the objective of this solution. The challenge, then, was to find a balance between providing a

customer approach methodology without losing the spontaneity and personality, and valuing the skills of each professional involved in commercial prospecting.

Thus, this document with main topics to be addressed in a meeting, allowing the consultant to obtain as much information as possible in the first meeting.

Regarding the use and access, the document must be presented in a non-editable digital format (possibly in PDF format), must also be available in the NAS system folder and in the consultant's email for quick access by mobile phone, if necessary. It was not designed another document in a online filling format due to the commercial meeting dynamic, which implies in direct contact with the client, it is not recommended the use of a document to be filled in during the meeting.

To facilitate the visualization and increase the level of receptivity of this resource by the team, it was important to study form of presenting the document. So, it was understood that it should be concise and have a visual appeal, which facilitates the understanding and use of the content, as well as the sequence of the topics, during the conduction of the meeting.

A template of the meeting support document can be found in APPENDIX I.

As a consequence of the quality of the customer's information collection (prospecting phase), the Operational Handover phase can benefit from the improvement in the meeting with the customer, and its subsequent registration and use of the information collected by the Market team, thus generating a correct diagnosis, and a correct initial analysis of project risks (commercial risks). Consistent information will minimize the risk of communication breakdown and lack of knowledge and detail when Market team transmits information to the Operations area.

As for the improvement of the following activity, Kick-off meeting, it was also suggested the creation of a document to support the meeting (APPENDIX J) that helps the client manager and project manager in conducting the meeting with the client, so that the meeting is efficient, with the maximum amount of information exchanged and doubts resolved.

The Kick-off meeting supporting document is more summarized than the Client's meeting supportive document, and it presents the topics that should be addressed in the Kick-off meeting, which are:

- Client's analysis (background and product/service analysis) identified by the team, and topics to be asked in search for further information;
- The goals and expectations about the project according to the client perspective and how Market Access can support them to achieve their objectives, validating them with the client:
- Strategy to be implemented considering the segment and positioning of the client's product/service in the target market, what are the deliverables of the project and how is going to be the communication done during the project, with subsequent validation with client;
- Commercial arguments, which means the reasons for the international market can be interested by the client's product/service;
- Risks identified by the consulting team, with their validation

This document will be available within the Order Directive file, in a slide of this file, also within the Project Directive data input file, to be consulted before or during the Kick-off meeting as a

guide for it. Another version (PDF format) of the document will also be available in a folder in NAS to be printed.

### Greater customer participation: a Project scope validation document

It could be observed that, even after the Kick-off meeting, sometimes a final validation of the project scope by the client is necessary and useful in order to minimize misunderstood and future complains. Also, it generates a sense of commitment to the client and their full understanding of the included and excluded scope, schedule and expected deliverables of the service contracted. Therefore, a solution for this issue is the generation and delivery of a document called Project Directive, that is, the result of all information already raised and agreed with the client, containing the following main items: Client analysis, Project objectives and strategy, Schedule and Deliverables, Team project, and Additional Notes.

- Client analysis: it concerns the client background (business model, international experience), and the main players of their business
- Project objectives and strategy: this topic comprises the reviewed objectives of the
  projects, after client analysis and meetings with the client (follow-up meetings, Kickoff meeting), as well as the strategy developed to reach the target market in terms of
  market segment, market positioning, marketing mix (product, price, distribution and
  communication)
- Schedule and Deliverables: it was developed a planned schedule which shows the tasks, milestones of each period and their deliverables;
- Team project: definition of each role of the project, both internal and external (client's representatives as project leader and project manager);
- Additional notes: it contains other relevant information for the development of the project.

The project manager (PM) shall be responsible for this document (as it already contains information from the project plan), with the advantage that most of its content will have been generated throughout the production process since then, that is, since the prospecting phase, accumulated in a single file (Order Directive), pending only some final adjustments in the project after the Kick-off meeting. When it is completed, as the Project Directive is a component part of the Order Directive, its extraction should be quick and simple, and it must be sent to the customer for their analysis and validation. Upon positive feedback, the project is officially started.

Like Order Directive file, the Project Directive has an original format in MS PowerPoint, being recorded in a PDF file to be sent to the client, which will have a period of 3 working days for validation. Similarly, Project Directive file must be available in at least four different languages: Portuguese, English, Spanish and French, seeking to ease the communication with most of the company's clients.

### Definition of the project follow-up procedure

The Client Manager, as an actor responsible for monitoring the end-to-end project, sometimes acting as an "auditor" of the project's execution and, due to their characteristic of independence and overall vision of the project, can mediate conflicts and facilitate the meeting of internal

(project team) and external (customer) needs to ensure that the deviations identified are quickly remedied and the quality of service is not affected.

It is worth mentioning that the Operations area is responsible for monitoring and measuring the project's progress, that is, the quality of the project's execution, having its internal controls to measure compliance with the project's schedule and planned actions.

In order to make monitoring and efficient communication possible inside and outside the company, it was suggested that the procedure for monitoring projects be based on PMBOK's good project quality management practices, where one of the pillars is the quality of project management processes. Thus, the following steps have been established:

- 1. Plan the monitoring of the project: define the method and frequency of communication with the client and obtaining information with the project team (when communication is required in addition to that defined by the operational project team in the Project Directive); define a direct contact person at the client; define the Project Directive as a master plan for monitoring project objectives, requirements, deadlines and deliverables;
- 2. Control the quality of this follow-up: hold necessary periodic meetings with the project team and the client; identify and deal with difficulties and deviations in the project plan that involve the various project stakeholders.

Once the method of communication with the client has been defined by the project team in the Operational Handover phase (described in the Project Directive), the CM can directly check with the client the necessity for additional and more frequent contact, to resolve doubts and/or necessary alignments and/or follow-up besides steering meetings conducted by the PM.

Having this information, client manager defines the frequency of communication required with the PM and formalizes it through email, also scheduling periodic status reports at Google Meet. With the Project Directive and the simplified project status report (developed and updated by the project team) at hand, CM and PM discusses about the gaps, difficulties and needs of the project team, as well as if there is a failure on the part of the client that is delaying the schedule. This communication must take place directly and informally, through phone calls or quick face-to-face meetings, in order to make the process less bureaucratic and streamline decision-making and action.

The contingencies or problems reported will be evaluated for complexity and urgency by the CM and if deemed necessary, they will be registered by email to the PM and/or the client, according to the necessary action. It is the CM's responsibility to monitor and demand the parties for the response and execution of the necessary actions during the development of the project. And, in order to demonstrate engagement and commitment of the client's manager in the project, it is important that the CM is present in the steering meetings and also in the weekly internal operations meetings to follow up the general or additional actions that may arise.

The structured details of the procedure for the "Project execution follow-up" activity by the CM are present in section 4.1.3 (3rd level model - Process work instructions) of this work.

#### Flexibility of activities and tasks

Some usual projects have enabled the company to get a useful expertise in those type of services so that it is possible for them to define a kind of standards for the methodology of these services.

In this sense, it was suggested the addition of three decision points for the top management to decide if the regular process should be followed or it should go through another and more optimized path, by substituting internal meetings for informative emails to the stakeholders.

The first decision point suggested is in Information Handover Meeting phase, in which the Market Manager (CCO) is in charge of deciding the internal handover method, with or without a meeting among Market area, Operations area, System manager and Communication manager.

When the project requires a meeting between the parties for better alignment of information, the traditional flow of the process is followed, and when it is not necessary to hold a meeting due to the low level of complexity and high experience of the team in that type of project, the commercial person responsible for the project and the CCO define who will be the Client Manager and the commercial person proceeds with sending an email with information about the project to the Operations team, the quality system manager and the communication manager. The email must be attached the approved proposal, the budget sheet and the Order Directive - Commercial Prospecting section.

As in the Information Handover meeting there is also the definition of the execution team and the analysis of the operational risks of the project, in case there is no meeting, when receiving the email from the Market area, the COO will be in charge of selecting the Project Manager and together define the team. Then, the PM will be responsible for analyzing the project risks in more detail, with the consequent completion of the Operational Risk Management section of the Order Directive.

Likewise, another decision point concerns the holding of the project's internal closing meeting, since, given the aforementioned circumstances of the project's typology and complexity its development follows the normal flow and without major restrictions, the COO may decide on the real need to gather the representatives of the areas to analyze and debate about the project, or on that an informative email shall be sent by the project team to the company's stakeholders to formalize the closing of the project.

In these cases, the closing process will be conducted by the PM, by completing the Order Directive - Project Closure Report section, as well as fulfilling the tasks of the closure checklist in its scope of responsibility and ensuring that the other actors involved also perform their respective tasks. After the documentation is completed, the PM will send an email to all stakeholders (COO, Market team, Management System Manager, Communication Manager) with the Order Directive and the final considerations that are deemed necessary.

## 4.1.1 1st level model – To-Be Responsibility Matrix

The innovations suggested in the Market process essentially demand resources and tools that improve the flow of information and communication inside and outside the company. However, to make this possible, in some parts of the process it was pertinent to define some responsibilities clearlier.

As previously mentioned, Market Access values the permanence, for now, of the matrix organizational model, which is very flexible in terms of delegating activities between the teams of the departments, mainly in the Market and Operational areas. Therefore, it is not part of the objective of this research to define the functions responsible for each activity in the process, but

Operational Prospection Commercial development Project follow-up Phases handover Project Market Commercial Proposal Proposal Kick-off Updating of Complaint Activities design of information Analysis prospection follow-up approval meeting information resolution proposal follow-up Actors Direction Commercial cco Client Manager Operations Service coo Proiect Manaaer International network National network Administrative and Infraestruture Information and Knowledge manager System manager **Enterprises** ORDER ORDER **Outputs of** DIRECTIVE ORDER ORDER DIRECTIVE the meeting Update Client DIRECTIVE DIRECTIVE Prospect Contract Answerto Baselines Final (email. diagnosis and Operational client database proposal signed **Project** complaints project CRM)

rather to highlight responsibilities of some key activities and tasks of a decisive nature, which are present in the To-Be responsibility matrix below (see Figure 10).

Figure 10: To-Be Responsibility matrix

Informed

Consultant

Responsible

In the As-Is matrix, the actors are classified by the company's areas, for example Commercial Service and Operations Service. In the matrix of the future situation, the CCO, Client Manager of the commercial area, and COO and Project Manager of the operations area were detailed, whose functions were explained during the Operational handover and Project follow-up phases.

The CCO decides the method of information handover to be carried out. From the moment the client's manager is defined (Internal information handover activity), the project's leadership with the client will be under his responsibility. In turn, in the operational area, the COO defines how the project briefing will be carried out to the execution team and at the end of the project it must decide whether it is necessary to hold an internal meeting to close the project. The project manager is responsible for analyzing the project's risks, developing and sending the Project Directive and, during the Project follow-up phase, the PM is responsible for closing the project.

report

Regarding the configuration of the phases and activities of Market process, it is suggested that the company apply a structure of 4 distinct phases and 11 main activities described in the To-Be responsibility matrix below, with a change in the "Information handover meeting" activity to "Internal information handover", since the suggested improvement implies an alternative method to the meeting to transfer information to the operational team.

Likewise, with the restructuring of activities, the baselines of the following activities were changed:

- Customer order management activity: from "Prior risk analysis" to Order Directive –
   Client diagnosis and Commercial risks sections;
- Internal information handover activity: from "Technical sheet of the project" to Order Directive – Operational risk analysis section;
- Kick-off meeting: from "Kick-off meeting report" to Order Directive Project directive;
- Project closure follow-up activity: from "Final project report" to Order Directive Final project report.

#### 4.1.2 2nd level model – Process swim lanes charts

With the clear definition of the improvements, responsibilities for the new tasks and baselines of each stage, it was possible to demonstrate the new process through Swim lanes charts for each phase of the Market process, by the use of BPMN for structuring the diagrams.

The addition of the proposed documentation is highlighted in the notations used in the charts, with the green symbols representing the meeting supporting documents as inputs to the tasks. The new documentation produced (Order Directive) is symbolized by a blue color. And the documentary outputs that remain used continue to be represented by the gray color. Changed tasks are highlighted in darker blue to differentiate them from current and unchanged tasks.

Starting the process, the swim lane of the Prospecting phase (see APPENDIX K) brings as the main change the inclusion of the supporting document for business meetings as an input to the task "Meet potential client", which can be used by the internal Market team and also through the national and international network, when partners eventually identify opportunities in the market and hold customer prospecting meetings. However, as most of the prospecting is carried out by the internal Market Access team, the focus of this research is on the process developed internally, where the controls and work instructions are more easily applicable. In this way, the output of the meeting is the update of the Customer Relationship Management (CRM) system and emails sent to the managers of the Market area (national or international), and to the potential customer, if a business opportunity has been identified.

Then, the Commercial Development phase presents a single change: the use of the new Order Directive document for preliminary analysis of project risks, which was previously within the Technical sheet of the project. Likewise, there is also a subsection in the Order Directive regarding the precise diagnosis of the customer and their needs. The swim lane for this phase is on APPENDIX L.

The third phase, Operational Handover, is the one with the greatest number of changes and improvements proposed. In its swim lane, on APPENDIX M, the use of the Order Directive replaces "Technical sheet of the project" in the Internal information handover activity, the

minutes of handover meeting and the kick-off meeting report, in addition to the creation of the Project Directive at the end of the phase, and its validation by the client. Another important improvement evidenced in the graph is the addition of actors, with the definition of tasks to the CCO, COO and project manager. It is important to highlight the supporting document for the kick-off meeting as an input to the "Prepare kick-off meeting" task.

Finally, in APPENDIX N it is represented the redesigned Project Follow-up phase. In its swim lane, the initial tasks of the "Project execution follow-up" activity were transformed into a subprocess "Update information about project development" under the responsibility of the client manager, which is detailed in the following section (4.1.3 3rd level model – Process work instructions), containing the step-by-step created to communicate and exchange information between the client manager and the project team and/or the client. In the activity "project closure follow-up", two additional decision points were suggested, one at the beginning of the activity regarding the need for a meeting between CM and PM to evaluate the project, before the final project closing meeting with customer. The other decision point concerns the COO's decision on how the project will be closed internally. This activity is essentially performed by Operations, and the CM has a more consultative role, participating in alignment and client meetings, and being consulted to provide information.

### 4.1.3 3rd level model – Process procedures and work instructions

With the proposed improvements, several activities in the Market process underwent changes, with the addition of new stages, and/or exchange of outputs and deliverables, as well as a clearer definition of those responsible for the tasks. In order to make their understanding and execution feasible, work instructions were developed for activities in the four phases of the process, namely the activities "Commercial prospection", "Internal information handover", "Kick-off meeting", "Customer order management" and "Project execution follow-up".

Some tasks, mainly those that require interaction with the client, fundamentally involve personal skills and knowledge of Market Access professionals, and this has demanded the development of work instructions contents more focused on the correct use of the available resources and tools, and on the sequence of execution of tasks, avoiding to over standardize the approaches to be taken with the customer, so as not to affect and limit the individuality, culture and personal style of each employee. These are the cases of the documentation developed for the activities of "Commercial prospection" and "Kick-off meeting", whose work instructions are displayed in APPENDIX O and P.

"Customer order management" and "Internal information handover" work instructions encompass few, important internal activities. The first one is essentially represented by tasks of information and knowledge sharing plus the detailed diagnosis after the business meeting. Its work instructions structure is shown in APPENDIX Q.

Meanwhile, the "Internal information handover" activity describes an intense and qualitative communication between Market area and Operations area. For enabling the successful performance of this activity was important to develop a work instructions document (see APPENDIX R) with several methods (by applying checklist, creating decision tasks and defining their decision makers) and making the process more flexible by giving people options for performing tasks.

Substantial changes were proposed for the "Project execution follow-up" activity, since it does not have an established procedure. Thus, steps and resources necessary for its execution was defined and the proposed structure for its work instructions is exhibited in APPENDIX S.

It is worth mentioning that some activities of the Market process have complex tasks classified as Subprocesses in the To-Be swim lanes developed in section 4.1.2. It is the case of "Organize information for internal handover" and "Internal closure of the project" tasks, which are of great relevance to the process, and whose "sub tasks" were arranged in a checklist within the Order Directive, so that the actions to be fulfilled are organized and easily managed by the responsible persons. Thus, there was no need to design your procedures and work instructions.

The "Project closure follow-up" activity was not selected for the creation of work instructions since a large part of the activity is performed by the Operations area, with the client manager having a more consultative role, participating in the meetings, than a protagonist and executor of tasks. Although these tasks have had proposed improvements, their core content is already designed and established in the company's institutional documentation (Procedure "Project Development", for example).

#### 4.2 Proposed means of process control

The current main objective of Market Access, that is, its value proposition, is to offer greater added value to the customer through the continuous improvement of its specialized services. This is also the objective of the Market process, which aims to raise new projects, conceiving ideal service proposals that meet the expectations and needs of the client, and guaranteeing the quality of the service provided through the end-to-end monitoring of the project. and effective customer relationship management.

For this purpose, the company seeks to improve both its operational efficiency and the quality and innovation of its processes and services. It is necessary, therefore, that they are measured by key performance indicators (KPI's) of effectiveness (related to quality) and efficiency (related to productivity and costs/profitability). Usually, the KPI's used to measure the achievement of strategic objectives are of the "lagging" type, as they demonstrate the results of one or more processes carried out. Once the results are analyzed, it is assumed that actions are necessary to achieve the results not yet obtained, and for that, KPI's of the "leading" type (are trend indicators) will help in the actions that need to be taken to achieve the objectives.

Currently, the "Indicators Map" of the Market process in force in the company (template available in APPENDIX T) has 6 indicators and most of them are financial KPIs, with the absence of KPIs for measuring the operation itself and the quality of the process. This has hindered a more complete analysis by the managers and the determination of necessary actions to effectively improve the process and achieve the objectives.

The Indicators Map represents a management dashboard that includes names, objectives, goals, measurement periods and history of KPI values, with presentation in tables and graphs, but without the source of data to measure them.

For a better visualization and understanding of their applicability, the KPI's of the Market process were organized in Table 4, with the addition of their metrics and classifications regarding performance (efficiency and effectiveness) and regarding a time dimension of trend or result (leading and lagging). It can be noticed that only "efficiency" KPIs are currently used.

Moreover, most of them are "lagging" KPI's, except for the "Amount of commercial meetings by type of Market segment" KPI, which can be considered a "leading" one due to being an action that foster the increasing of the number of clients and projects for the company. Similarly, the indicators "Total revenue" and "Profit margin" are detailed, according to a drill-down criteria of types of project and client, in the case of revenue, and of type of market segment, in the case of profit margin.

Perfomance dimension Temporal dimension Unit of Effecti-Measurement KPI Metrics Efficiency Leading Lagging frequency veness ment ∑ sales income of projects Sum of revenue of the company in a month monthly, **Total Revenue** It is compared to a sales income target defined by the annualized Drill-down Total revenue of the type of project / Total revenue monthly criterion: type Types of projects: Mission, Commercial development, annualized of project Market study, Support in fairs/events etc.. Drill-down Revenue from private entity clients / Total revenue monthly, criterion: type Revenue from public entity clients / Total revenue annualized of customer Revenue of international projects / Total revenue International projects means the projects of clients monthly. **Export rate** outside Portugal annualized KPI is compared to a profit target defined ((Total revenue - Costs)/Total revenue) \* 100 monthly, **Profit margin** It is compared to a profit target defined annualized Drill-down ((Seament revenue - Seament Costs) / Seament monthly, % revenue) \* 100 criterion: Market annualizea segment Seaments: National and International Contribution (Total revenue - (Costs + Expenses))/ Total revenue margin annualized **Customer debts** ∑ overdue billing of clients monthly Amount of meetings held by each segment / Total of Amount of commercial commercial meetings held monthly meetings by type Segments considered: National private segment, of Market segmen National public segment, International segment

Table 4: Current KPI's of Market process

In order to assist the development of KPI's that facilitate a broader and qualitative management of the Market process, some aspects related primarily to the company's value proposition and strategic objectives were considered, as well as the feasibility of measure KPI's, and the possibility of encompassing as many steps as possible, qualitatively and quantitatively.

Seven KPIs were suggested. For KPI's on conversion rate and on-time compliance rate, it was suggested to apply a drill-down criterion by Market segments so that managers can analyze both overall and sectoral performance of the Market team. Then, three effectiveness KPIs were proposed to measure the quality of market Prospecting, through "Leads conversion rate" KPI and of the Proposals designed, through "Client conversion rate" KPI.

Subsequently, the follow-up phase is crucial to be measured, since the client manager is responsible for ensuring quality in the relationship with the client. For this, the two effectiveness KPIs were developed: "Average complaints resolution time", for periodic monitoring of the performance of the client's manager during the execution of the project and their ability to meet the needs of the interested parties, and the KPI "Client manager performance satisfaction index "as a general measure of the performance of this professional at the end of the project.

This indicator can integrate the existing Customer Satisfaction Survey on the project, and the suggestion is to add the following questions to the survey:

- 1. On a scale from 0 to 10, how satisfied are you with the quality of the information provided by the Client Manager during the project?
- 2. On a scale from 0 to 10, how satisfied are you with the monitoring and handling of problems by the Client Manager during the project?
- 3. Please identify opportunities for improvement in Client Manager activities or performance.

Table 5 below describes the information and classifications of the proposed KPIs.

Table 5: Proposed KPI's for Market process

					Perfoman	ce dimension	Temporal	dimension
#	КРІ	Unit of measurement	Metrics	Measurement frequency	Effecti- veness	Efficiency	Leading	Lagging
1	Database contacts growth rate	%	Number of new contacts added in the database from the last measurement / Total number database contacts	biweekly		•	•	
2	Leads conversion rate	%	Number of proposals designed from the Prospection phase / Number of commercial meetings carried out	monthly, annualized	•	•	•	
	Drill-down criterion: Market segment	%	Number of proposals designed by each Market segment / Number of commercial meetings carried out by each Market segment Market segments: National private segment, National public segment and Internacional Market	monthly, annualized				
3	Client conversion rate	%	Number of proposals approved / Total number of proposals designed	monthly, annualized	•	•		•
	Drill-down criterion: Market segment	%	Number of proposals approved by each Market segment / Total number of proposals designed by each Market segment Market segments: National private segment, National public segment and Internacional Market	monthly, annualized				
4	On-time proposal delivery rate	%	Number of proposals delivered on-time / total proposals delivered A deadline for sending the proposal must be previously defined	monthly		•		•
	Drill-down criterion: Market segment	%	Number of proposals delivered on-time by each segment / total proposals delivered by each segment Market segments: National private segment, National public segment and Internacional Market	monthly				
5	On-time Kick-off meeting rate	%	Number of meetings held on-time / total meeting held A deadline for holding the meeting must be previously defined	monthly		•		•
	Drill-down criterion: Market segment	%	Number of meetings held on-time by each segment/ total meeting held by each segment Market segments: National Market and Internacional Market	monthly				
6	Average complaints resolution time (Client Manager)	days	Sum of times needed to the CM communicate and solve client complaints / Number of client complaint in the period.	monthly	•	•		•
7	Client manager performance satisfaction index	Integer	Average CM performance scores throughout the project, from the customer's perspective. From a scale of 0 to 10, where 10 is the maximum satisfaction and 0 the extreme dissatisfaction.	end of the project	•			•

When analyzing the indicators currently used and the way they are presented, it was difficult to understand the metrics used in some of them and there was no such information in the existing documentation. In order to provide more detailed information to stakeholders about the control of processes, it is pertinent to identify the source of the data used to calculate KPI's.

Similarly for the proposed KPI's, in addition to providing complete information about them, it is necessary to ensure that there are means to measure them, suggesting new controls if necessary. It is the case of deadlines KPI's. As this information is not measured yet, Market team internal control document (MS Excel) does not detail the planned and real data for sending

commercial proposals and holding the kick-off meeting, being thus necessary to add fields for this data in the Excel sheet.

### **4.3 Testing of solutions**

Continuing the improvement cycle, it is necessary to test the new process and to validate it with specialists and decision makers (company users) before implementation. Tests should include all types of stakeholders involved in the entire process and different types of projects, to be chosen by the top management), with the definition of follow-up schedule for the analyst responsible gets regular feedback from the actors and can provide the possible changes and improvements. Every change in the proposed process must be registered in a test information control document and reported to the Innovation manager regularly (frequency to be defined) so that it can be analyzed and validated before its performing.

For this, a test plan must be developed, containing the sequence of activities to be performed, the actors involved in each activity/task, the means to give information/feedback about their experience in performing the tasks. Due to the majority of leadtimes of the activities is variable (according to the type of project and progress and success of the negotiations), the plan should not have a prior deadline defined. Critical or substantial changes necessary in the proposed process should be shared and validated by the CCO. During the test, it must also be measured the effectiveness and efficiency through the KPI's defined for it. In APPENDIX W is shown a template for Process plan and control the tests, managed and updated for an analyst defined.

#### 4.4 Integration to the management system

As part of the BPM life cycle, after proposing improvements and validating them, Management and Improvement System area is supposed to be in charge of the systems and documentations adequacy. In this sense, employee involvement and sponsorship from top management is valuable to ensure both efficient implementation of improvements and adherence of changes by the team. It will also be under responsibility of Innovation area the development and conduction of training for all those involved in the process.

Furthermore, transparent disclosure and information sharing (data, performance indicators) are part of the efficiency of communication, which was suggested in the previous section (4.2 Proposed means of process control), as well as the clear definition of procedures and instructions for work that facilitate the gathering, registration and exchange of information, also promoting the sharing of knowledge.

It is relevant to mention that the proposed solutions use the same technological tools already adopted by the company, such as the SOAPP ERP, the NAS document system and the Filemaker Pro relational database, in addition to the usual MS Office programs, adapting them to the control methods processes, information recording and analysis of results already used.

Regarding the review and adaptation of organization's document structure, the current study generated several deliverables, for business management and as outputs of the service provided. Such innovations require documentary adaptation to the models used in Market Access after validation of its applicability, as dictated by the Management and Improvement Systems process, responsible for controlling documented information and records.

Moreover, it is necessary to ensure the availability of documents and models created in the NAS document system and compliance with the coding structure adopted in the company. In this sense, the main change is the replacement of the forms "Technical definition of the project", "Kick-off meeting report" and "Project Charter" by the Order Directive as an official document to record the following information: information about the client in the commercial development phase, Information Handover procedures, Kick-off meeting data, Project Directive as a project master plan and an additional document (separately) to be sent to the client for validation, and finally also information about the project closure.

The creation of the two supporting documents for meeting with clients and for Kick-off meeting shall be included into the company documents, being both available in the document system.

The fact sheets of Market and Operations processes should be revised to suit the new activities proposed in the Operational Handover and Project Follow-up phases, as well as the stakeholders involved and documentation throughout the four phases of the Market process. However, it is suggested to change the graphical representation of the Market process on its fact sheet, including Swim lane charts to enable an integrated visualization of the process, containing the sequence of activities and their relationship with their respective actors.

The work instructions developed for five key-activities shall be validated and included in the company's documentation. Equally important, it is suggested the KPI's, both current and new ones, are included in Market process fact sheet so that it is possible to have a wider view of the process, combining the flow of activities with the actors involved, their inputs and outputs and knowing how this process is measured in order to achieve the objectives defined for it.

As previously mentioned, there were a difficulty to understand the metrics and formula of some KPI's, and this can be solved by including a new page in the Indicators Map with a detailed KPI fact sheet, which also benefits the transparency of information in the company. For this, it is proposed a scheme containing KPI's information, including the data source identified for current and proposed indicators, as shown in APPENDIX U.

In order to resolve the gap of data required for measuring "On-time proposal delivery rate" and "On-time Kick-off meeting rate" KPI's, it is suggested the adaptation of the current document. A template of the adapted Excel sheet is shown in APPENDIX V, with the following fields added to enable the KPI's measurement: Planned date for sending proposals (defined after the business meeting and informed to the customer via email); Real deadline for sending proposal, in days; Compliance with the deadline for submitting proposal", "Planned date for KOM", "Real KOM date" and; "Compliance with the KOM deadline".

As a suggestion for future innovations, there are many opportunities for applying digital transformation in the studied context, without significant investments in information technology for some of them. This is the case with the automation of the Order Directive to enable data input through a more professional and error-proof layout interface, through forms developed by programming in MS Access or Visual Basic for Applications (VBA). There is also the possibility of integrating the Order Directive into the Filemaker Pro relational database, for secure and quick consultations of all the project's internal control information, with the additional possibility of generating customized reports. In the long term, a useful and high-value tool for the customer may be the use of a system for remote and real-time access to the project's progress by the customer, with the possibility of integration with the company's ERP,

in order to also facilitate the financial management, promoting transparency, agility and less bureaucracy in the process.

Finally, in the implementation and controlling step, the process is supposed to run effectively supported by the controls defined, and measured by the KPI's.

#### 5 CONCLUSION

This last chapter addresses the conclusions related to the research project developed and its results are analyzed in view of the existing literature to highlight the contributions of research to science, as well as to suggest future developments in this field of study.

#### 5.1 Main conclusions

The present research was carried out in a Portuguese internationalization consulting company, with the purpose of developing a proposal of redesigning a key business process through the application of business process management and service design good practices, aiming to enhance organizational expansion through innovation in the services provided.

The understanding of the company's strategic objectives and how the consequent need for innovation in its services could be evidenced were the starting point to identify the need to increase its operational efficiency and at the same time focus on the quality of the final service provided and exceeding customer expectations.

Improving internal processes tend to generate improvements in efficiency, but the restricted analysis of tasks and process activities would be insufficient to generate the expected qualitative gains, since the company's business model has the quality of information, the excellent communication between the parties (internal and external) and knowledge management as critical success factors. It was necessary to consider the universe of aspects connected to the business processes: organizational structure, customers, information flow and technology involved. So, it would be possible to better analyze the process and propose improvements that would provide an increase in operational efficiency and reflect in services with greater added value from the customer's perspective.

The redesign process until the solution proposal was developed during four months at the Market Access consultancy company, using a structured methodology that allowed the identification of problems and proposal of robust and practical solutions in accordance with the company's strategic objectives and the requirements defined for this process redesign project.

There was difficulty to find in the literature cases of application of process redesign specifically in a specialized consulting services company, in order to analyze the good practices that would assist the development of an adequate methodology for this context. Because the company has already a good level of maturity in process management, BPM, as a systematic approach that seeks to improve business processes, was used to guide the methodology and tools applied in this research, which focused on a core process - Market process.

The study development consisted of the following steps: knowledge of the company's business model, identification of the problem, identification of stakeholders and requirements for the improvement project, followed by the selection of the process to be studied and its current situation analysis. When prioritizing problems with potential to be improved, improvement opportunities were identified, which led to the redesign with the support of a To-Be multilevel model. The means of controlling the process were subsequently analyzed, with the suggestion of adding new KPIs appropriate to the measurement of the new process and to the organizational objectives. Finally, since the company has a defined management system, the

necessary actions to integrate the proposed improvements to its management system were also informed, recommending the development of an implementation schedule for it.

The Market process restructuring generated the following deliverables: new responsibility matrix, new process flows, in the form of swim lanes charts, for the four component phases of the process, work instructions for redesigned activities, a single document for entering and controlling the project information by the various stakeholders involved in the service production; proposal for a KPI fact sheet to be inserted into the Indicators map.

Since the proposed incremental innovations were developed based on a structured and scientific methodology, it is deemed that their conception achieve both objectives outlined for this redesign project: increase operational efficiency, by addressing the internal problems identified, and; deliver higher value-added service to customers, based on the perception of their main needs identified. However, it will only be possible to assess the achievement of the expected results when the improvements are implemented, and their effectiveness is evaluated.

The expected operational efficiency gains are:

- Greater productivity of projects with the clear definition of those responsible for tasks
  and flexibility of activities in order to reduce the bureaucracy in the process, accurate
  commercial diagnoses performed in less time, more productive commercial
  development by stipulating deadlines for the generation of its outputs and, not least,
  agility and practicality in the insertion of data and information related to projects in the
  Order Directive document;
- Better control of the Market process through the definition and detailing of new KPIs, for better visualization and understanding of the process performance indicators.

Furthermore, there are possible gains in the quality of the process due to the improvement in internal communication resulting from the use of documents to support meetings and from the use of Order Directive as a tool that offers greater clarity and relevance of the information needed for the project.

As for the greater value delivered to the customer, the applied methodology sought to enable the following gains:

- Shorter waiting time for receiving information and/or deliverables with the definition and control of deadlines for delivering proposals and holding a project kick-off meeting;
- Better communication, alignment of expectations and value co-creation with assertive meetings and generation of Project Directive to validation of project scope with clients;
- More efficient customer relationship management with the definition of a clear procedure for follow-up of project execution by the Market area.

It was also observed that such innovations directly benefit organizational management, since they will provide a documentation more consistent with the real process, will promote greater transparency in information and better monitoring of the performance of the process through KPIs directed to this purpose.

It is important to note that the use of information technology is a fundamental resource for the feasibility of changes and the challenge of proposing incremental improvements that used existing or low-cost technological resources were some of the most important and guiding requirements for the development of solutions.

With these solutions implemented, it is expected that the internal problems of communication failure, failure to diagnose the customer's need, lack of a defined control procedure, lack of standardization in the capture and recording of information and excessive documentation, as well as the external problems of communication with client and the delivery delays related to the Market area shall be minimized or eliminated. This will foster a greater interaction and commitment of customers, which enable the value cocreation, resulting in innovative services that deliver higher added value to the market, reflecting in a competitive advantage over the competition.

The present research presented limitations regarding the direct access to customers or potential customers during the research, which could have generated a more accurate diagnosis of their needs in relation to the services provided by Market Access. Customers information would enrich the research, through the value co-creation and enabling a more assertive redesigned process model.

The inclusion of the Service Design holistic approach in this study made it possible to carry out a qualitative study with a greater focus on the client – both in the identification of needs and problems, and in the search for solutions – indicating a successful combination of fields of study: BPM and Service Design. BPM contemplates in its guidelines the need to consider the customer as a fundamental part for the optimization of business processes. With the insertion of Service Design and Design Thinking concepts, the analysis and improvement of processes can be better structured under a service logic, which main goal it to meet customer expectations.

## 5.2 Future developments

As to deepen the knowledge on the subject and make it possible to validate and generalize its results, it is suggested that the methodology of business process redesign be applied in other case studies, with the important addendum on the need to complete the cycle of BPM with the implementation and monitoring of the redesigned process, which is not included in the scope of this study. Also, in order to certify which is the most appropriate methodology to be used in projects similar to this research, it would be pertinent to apply other modeling techniques in the phases of analysis of the current state and in the redesign of processes.

Additionally, since the participation of customers was not possible during this research, as one of the most important stakeholders of the service system, it is strongly recommended that future researchers can refine the current methodology by applying multilevel service design method for understanding the problem and the service (As-Is) and for generating and validating ideas (To-Be), providing a broader, customer-oriented approach for the solutions.

As future opportune developments for Market Access company, it is recommended that they develop the redesign to other critical processes, namely the Operations process, that is other company's core process and is heavily interconnected to Market process, being entirely appropriate streamline this process responsible for the execution of the projects.

With the expected growth of the company, it will be recommended for the future to use a BPMS (Business Process Management System) for a practical and integrated management of processes. Likewise, the use of software such as Bizagi Modeler is useful for modeling processes. It eases the understanding of processes due to its graphical interface, and the integration with BPMS, reducing costs and time spent on migration for this type of tool.

#### **REFERENCES**

Akhavan, A. (2015). Business Process Re-Engineering using SharePoint in a consulting company (Master's thesis, Universidade do Porto).

Araújo, M. B., & Gonçalves, R. F. (2016). Selecting a notation to modeling business process: a systematic literature review of technics and tools. In IFIP International Conference on Advances in Production Management Systems (pp. 198-205). Springer, Cham.

Association of Business Process Management Professionals (ABPMP) (2013), Guia para Gerenciamento de Processos de Negócio – Corpo Comum de Conhecimento, Versão 3.0. ABPMP, São Paulo.

Belluzzo, R. C. B. (2017). Bases teóricas de gestão da informação: das origens aos desafios na sociedade contemporânea. Palabra Clave (La Plata), 7(1).

Davenport, T. H., & Short, J. E. (1990). The new industrial engineering: information technology and business process redesign.

Davenport, T.H. (1994), Reengenharia de Processos: Como Inovar na Empresa Através da Tecnologia da Informação, Campus, Rio de Janeiro.

de Morais, R. M., Kazan, S., de Pádua, S. I. D., & Costa, A. L. (2014). An analysis of BPM lifecycles: from a literature review to a framework proposal. Business Process Management Journal.

Dewett, T., & Jones, G. R. (2001). The role of information technology in the organization: a review, model, and assessment. Journal of management, 27(3), 313-346.

Forés, B., & Camisón, C. (2016). Does incremental and radical innovation performance depend on different types of knowledge accumulation capabilities and organizational size?. Journal of business research, 69(2), 831-848.

Hanafizadeh, P., Moosakhani, M., & Bakhshi, J. (2009). Selecting the best strategic practices for business process redesign. Business Process Management Journal.

Hermann, M., Pentek, T., & Otto, B. (2016, January). Design principles for industries 4.0 scenarios. In 2016 49th Hawaii international conference on system sciences (HICSS) (pp. 3928-3937). IEEE.

Houy, C., Fettke, P., & Loos, P. (2010). Empirical research in business process management—analysis of an emerging field of research. Business Process Management Journal, Vol. 16 No. 4, pp. 619-661.

International Organization for Standardization (ISO) – The process approach in ISO 9001:2015.

Koberg, C. S., Detienne, D. R., & Heppard, K. A. (2003). An empirical test of environmental, organizational, and process factors affecting incremental and radical innovation. The Journal of High Technology Management Research, 14(1), 21-45.

Mansar, S. L., & Reijers, H. A. (2007). Best practices in business process redesign: use and impact. Business Process Management Journal.

Market Access, Manual de Gestão, 2018.

McCormack, K., Willems, J., Van den Bergh, J., Deschoolmeester, D., Willaert, P., Štemberger, M. I., ... & Vlahovic, N. (2009). A global investigation of key turning points in business process maturity. Business Process Management Journal, Vol. 15 No. 5, pp. 792-815.

Narasimhan, R., & Jayaram, J. (1998). Reengineering service operations: a longitudinal case study. Journal of Operations Management, 17(1), 7-22.

Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2014). Value proposition design: How to create products and services customers want. John Wiley & Sons.

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

Owen, M., & Raj, J. (2003). BPMN and business process management. Introduction to the new business process modeling standard, 4.

Paim, R., Caulliraux, H.M. and Cardoso, R. (2008), "Process management tasks: a conceptual and practical view", Business Process Management Journal, Vol. 14 No. 15, pp. 694-723.

Patrício, L., & Fisk, R. P. (2013). Creating new services. Serving customers globally, 185-207.

Ragu-Nathan, B., Ragu-Nathan, T. S., Tu, Q., & Shi, Z. (2001). Information management (IM) strategy: the construct and its measurement. The Journal of Strategic Information Systems, 10(4), 265-289.

Scholes, K., Johnson, G., & Whittington, R. (2002). Exploring corporate strategy. Financial Times Prentice Hall.

Skålén, P., Gummerus, J., Von Koskull, C., & Magnusson, P. R. (2015). Exploring value propositions and service innovation: a service-dominant logic study. Journal of the Academy of Marketing Science, 43(2), 137-158.

Trkman, P. (2010). The critical success factors of business process management. International journal of information management, 30(2), 125-134.

Tushman, M. L., & Romanelli, E. (1985). Organizational evolution: a metamorphosis model of convergence and reorientation. In L. L. Cummings, & B. M. Staw (Eds.), Research in Organizational Behavior, vol. 7 (pp. 171–222). Greenwich, CT: JAI Press.

van der Aalst, W. M., La Rosa, M., & Santoro, F. M. (2016). Don't forget to improve the process!. Business Process Management, 58(1), 1-6.

Vanwersch, R. J., Shahzad, K., Vanderfeesten, I., Vanhaecht, K., Grefen, P., Pintelon, L., ... & Reijers, H. A. (2016). A critical evaluation and framework of business process improvement methods. Business & Information Systems Engineering, 58(1), 43-53.

Witell, L., Snyder, H., Gustafsson, A., Fombelle, P., & Kristensson, P. (2016). Defining service innovation: A review and synthesis. Journal of Business Research, 69(8), 2863-2872.

### **APPENDIX A: Interview guidelines**

#### Interview questions - top management

- 1- What are your expectations of the innovations to be developed? What kind of specific innovation is it important for the company?
- 2- What are the main processes or type of process you would like to be studied and why?
- 3- Which problems or failures have been impacting for the quality of the Market Access services?
- 4- In your opinion, what requirements are important to be considered for improvements implementation?
- 5- In your opinion, what is more valuable for the clients in terms of the consultancy services (meeting deadlines, quality of service, communication...)
- 6- Which process do you think is the most critical to be studied in the customer's perception?

#### Interview questions – core process managers

- 1- What is your role in the organization?
- 2- How long have you been performing this role?
- 3- How would you define a successful service in Market Access?
- 4- Which problems or failures use to affect the quality of the services provided?
- 5- Which of these problems or gaps are directly related to your process?
- 6- What are the stakeholders (internal and external) involved in your process?
- 7- In your opinion, what requirements are important to be considered for improvements implementation?
- 8- How do you communicate the existing problems to your team?
- 9- How do you communicate the existing problems to other areas of the company and to the partners?
- 10- Does your team know who your customers and suppliers are, and how to perform and evaluate your tasks?
- 11- What technological tools do you and your team use to execute processes?

## **APPENDIX B: As-Is fact sheet - Market process**

	PROCESSO	Código:	C01
marketaccess	PROCESSO	Revisão:	01
EXPERTS IN INTERNATIONAL BUSINESS		Data:	09/01/2020
	Mercado	Owner:	Pedro Vieira

## 1. Objetivo

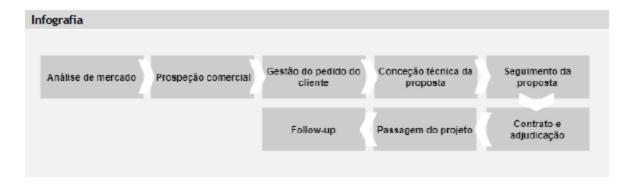
Promover a imagem da Market Access, aumentar a quota de mercado e elaborar proposta de valor acrescentado para as partes interessadas.

#### 2. Âmbito

Aplica-se a todas as atividades comerciais e de promoção da Market Access junto de cliente e potenciais clientes.

3. Interligação com outros Processos								
Montante	Jusante							
Todos	Todos							

4. Descrição do Processo			
Fornecedores	Entradas/Inputs	Saídas/Outputs	Clientes
Empresas	Plano Estratégico	Propostas	Mercado
Rede Internacional	Mercados Estratégicos	Contratos	Empresas
Colaboradores	Histórico de projetos	Adjudicações	Rede Internacional
Contactos	Oportunidades	Base de dados atualizada	Parceiros nacionais
Associações	identificadas	Promoção da imagem da	
Entidades Públicas	Contactos de clientes	empresa	
	CRM/Filemaker	Promoção da Rede	
	Reclamação	Internacional	
		Ações de divulgação	
		Resposta a reclamações	



G02.MD01.00 Distribuição Proibida

Elaborado por: Susana Mendonça Aprovado por: Rui Sousa
Data: 09/01/2020 Data: 09/01/2020



	R	esp	on	sáv	eis/	En'	vol	vid	os	Documentos/	
Atividades	DIR	SC	SAI	S	≅	RPN	OIC OIC	છ	ш	C	Descrição
Análise de mercado	0	•		0	0	0				Base de dados da Market Access S06 Makerting e Comunicação Internet Base de dados de Programas Internacionais CRM/Filemaker G01 Gestão do Negócio S05 Gestão da Informação e do Conhecimento	Pesquisa, recolha, filtragem de informação sobre potenciais clientes, através de diferentes tipologias de clientes, priorizando de acordo com as características de cliente.  Contactos com a rede internacional e a rede de parceiros nacionais para partilha de informação.  Atualização de bases de dados.
Ψ											
Prospeção comercial		•	0		•	•			0	G01 Gestão do Negócio CRM Apresentação corporativa Outputs de reuniões comerciais (email,CRM)	Realização de contactos de acordo com as prioridades definidas. Contacto com potenciais clientes para apresentação da empresa, recolha de informação e agendamento de posterior contacto. Resposta a solicitações.
Ψ.											
Gestão do pedido do cliente		•		0	0	0	0			desenvolvimento e adjudicação de propostas	Recolha de informação, diagnóstico de necessidades e tipo de serviço pretendido.  Avaliação inicial interna das capacidades para a realização dos serviços solicitados.  Análise de riscos associados à solicitação e à relação com o cliente.
Ψ											

G02.MD01.00 Distribuição Proibida

Elaborado por: Susana Mendonça Aprovado por: Rui Sousa
Data: 09/01/2020 Data: 09/01/2020



Responsáveis/Envolvidos											
Atividades			ons K							Documentos/ Suportes Informáticos	Descrição
Conceção técnica da proposta	0	•		0	0	0	0			C01.MD01 Ficha de orçamentação C01.MD02 Proposta comercial	Desenvolvimento da solução técnica, definição de recursos e orçamento a apresentar ao cliente.  Quando aplicável, recolha de informações adicionais (rede internacional, produto, mercados, riscos associados)
Seguimento da proposta		•							0	comercial	Envio ou visita ao cliente para apresentação da proposta. Reformulação da mesma, caso necessário.
<b>↓</b>	↓										
Contrato e adjudicação	0	•	0	0	0	0	0		0	Contrato CO2 Operações SO3 Gestão da Rede Internacional SO2 Gestão da Rede de Parceiros Nacionais	Formalização da proposta, redação do contrato e receção da adjudicação.
<b>↓</b>											
Passagem do projeto		•		0						C01.MD03 Definição Técnica do Projeto C02.MD03 Relatório reunião	Formalização da adjudicação.  Atualização da área operacional sobre os dados técnicos gerais do projeto.  Reavaliação dos riscos.  Sessão de diagnóstico no cliente para alinhamento dos seus objetivos e expectativas, das suas condições estruturais, etc.
<b>↓</b>											
Follow-up		•		0	0	0				C01.PR02 Gestão de Reclamações de cliente	Gestão da relação com o cliente, acompanhamento do desenvolvimento do projeto, perceção da qualidade e avaliação do projeto, monitorização e registo de reclamações, sugestões, novas oportunidades.
Legenda: ● Responsável; O Envolvido G02.MD01.00 Distribuição Proibida											

Elaborado por: Susana Mendonça

Aprovado por: Rui Sousa Data: 09/01/2020 Data: 09/01/2020

	PROCESSO	Código:	C01
marketaccess experts in international Business	PROCESSO	Revisão:	01
		Data:	09/01/2020
	Mercado	Owner:	Pedro Vieira

## 5. Indicadores

(ver mapa de indicadores)

6. Definições e abreviaturas								
Sigla	Descrição							
DIR	Direção							
E	Empresas							
GC	Gestão da Informação e do Conhecimento							
SAI	Serviço Administrativo e de Infraestruturas							
SC	Serviço Comercial							
SO	Serviço de Operações							
RI	Rede Internacional							
RPN	Rede de Parceiros Nacionais							
GS	Gestor do Sistema							

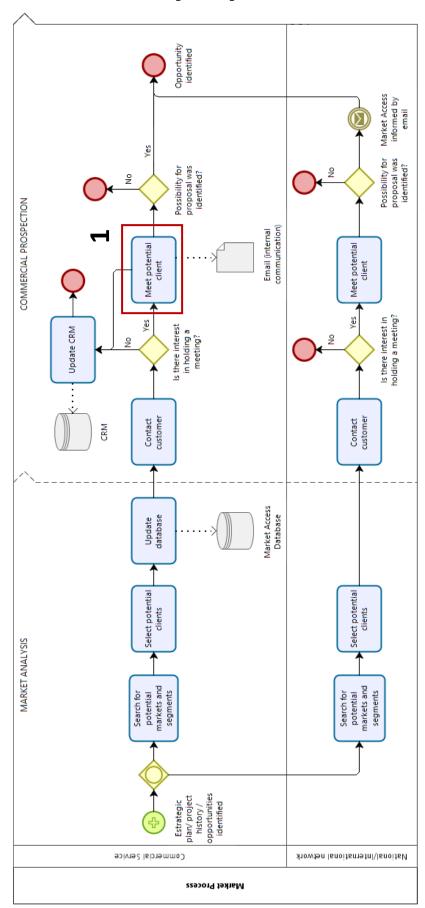
Revisão	Data	Descrição das Modificações
00	21/06/2018	Criação do documento
01	09/01/2020	Inclusão do Filemaker e retirada da atividade de marketing e comunicação (passou para o processo de Marketing e Comunicação)

G02.MD01.00 Distribuição Proibida

Elaborado por: Susana Mendonça Aprovado por: Rui Sousa Data: 09/01/2020 Data: 09/01/2020

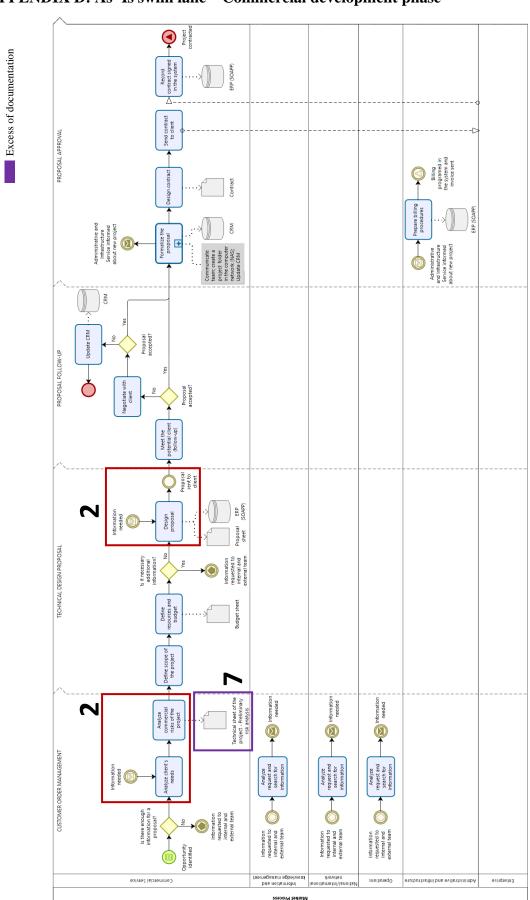
# **APPENDIX C:** As-Is swim lane – Prospection phase

Information gap

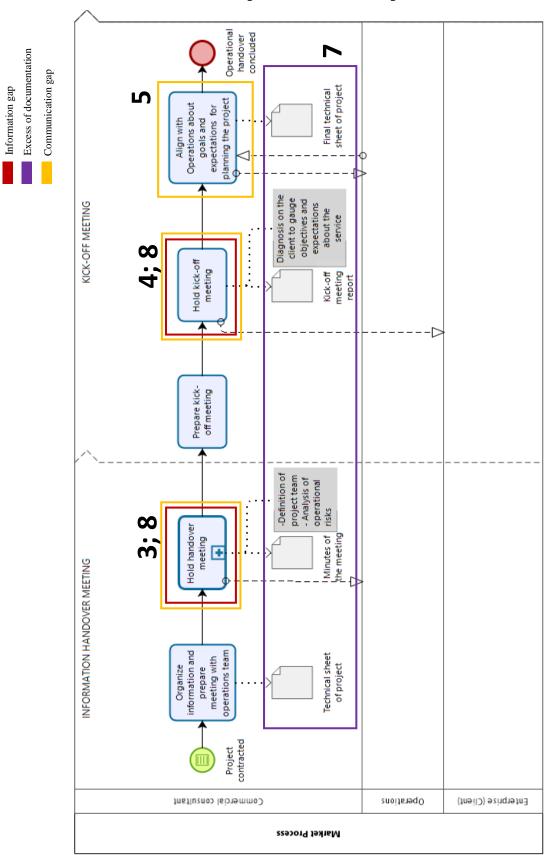


# **APPENDIX D: As- Is swim lane – Commercial development phase**

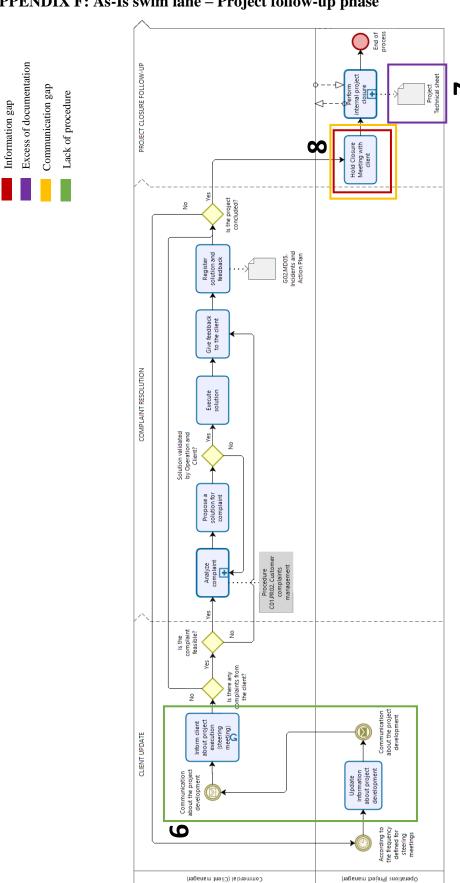
Information gap



# APPENDIX E: As-Is swim lane – Operational handover phase



# APPENDIX F: As-Is swim lane – Project follow-up phase



## **APPENDIX G: Order Directive data input file mockups**

Project Manager

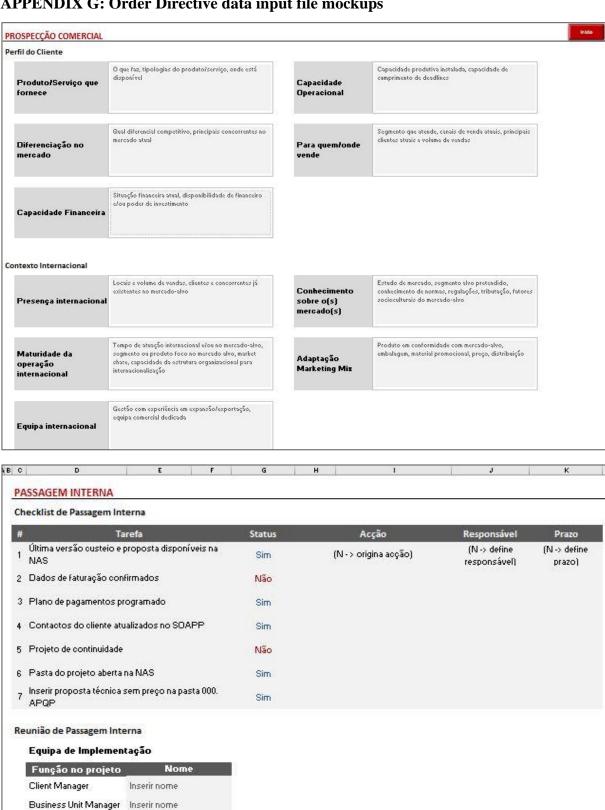
Market Developer

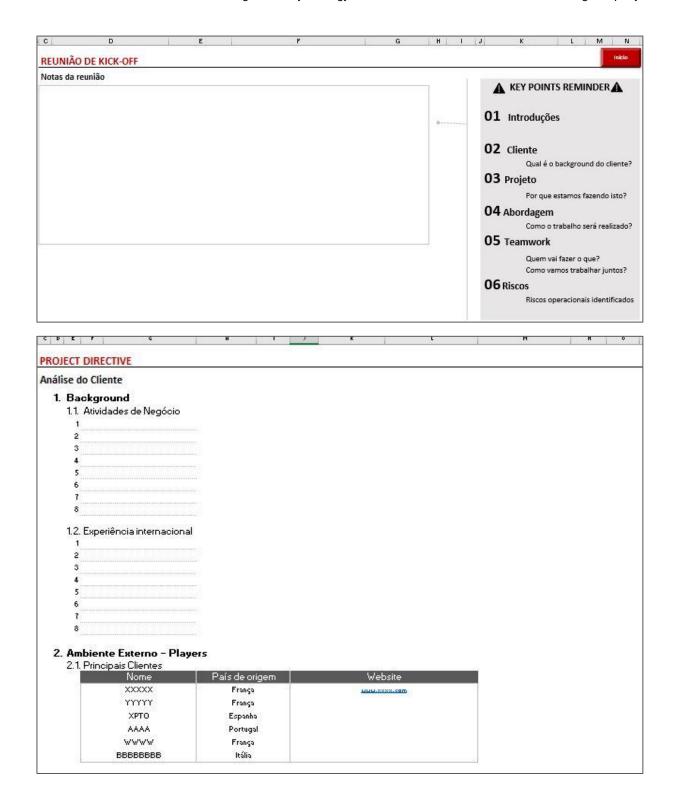
Sponsor

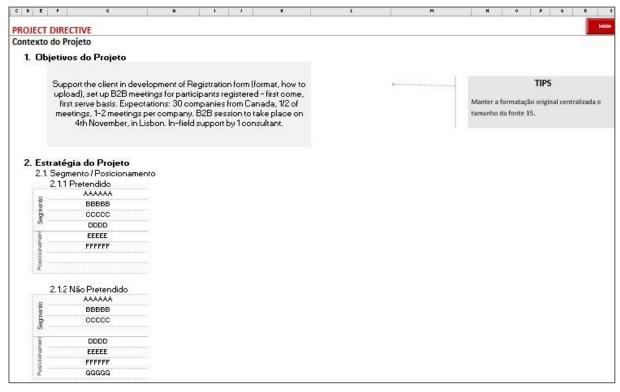
Inserir nome

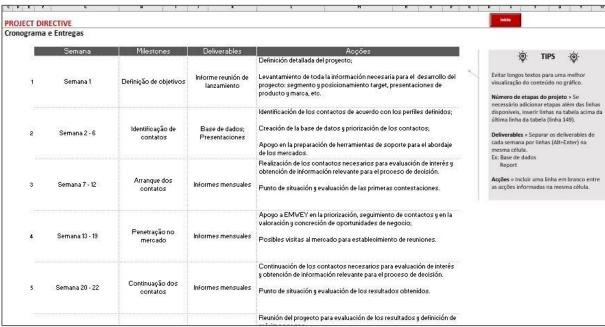
Inserir nome

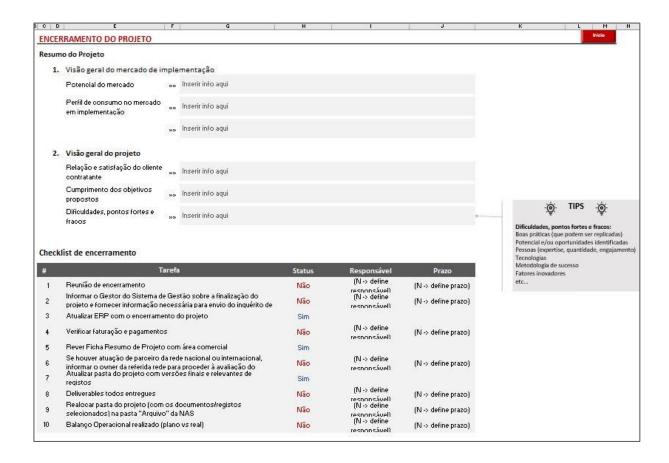
Inserir nome



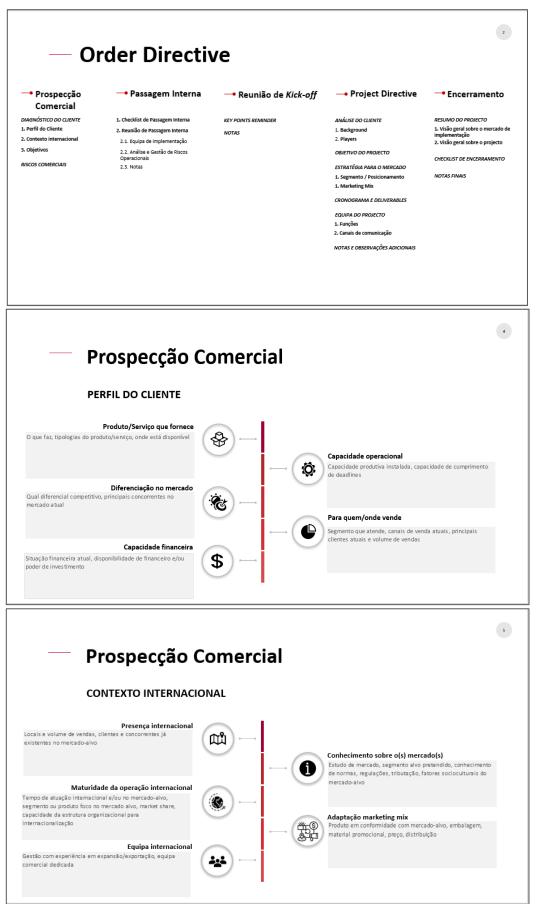


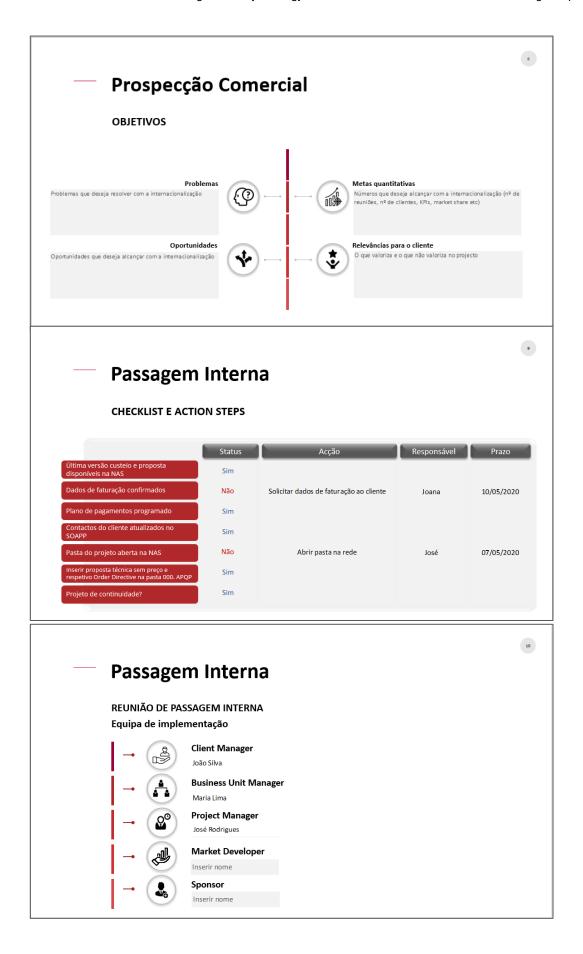




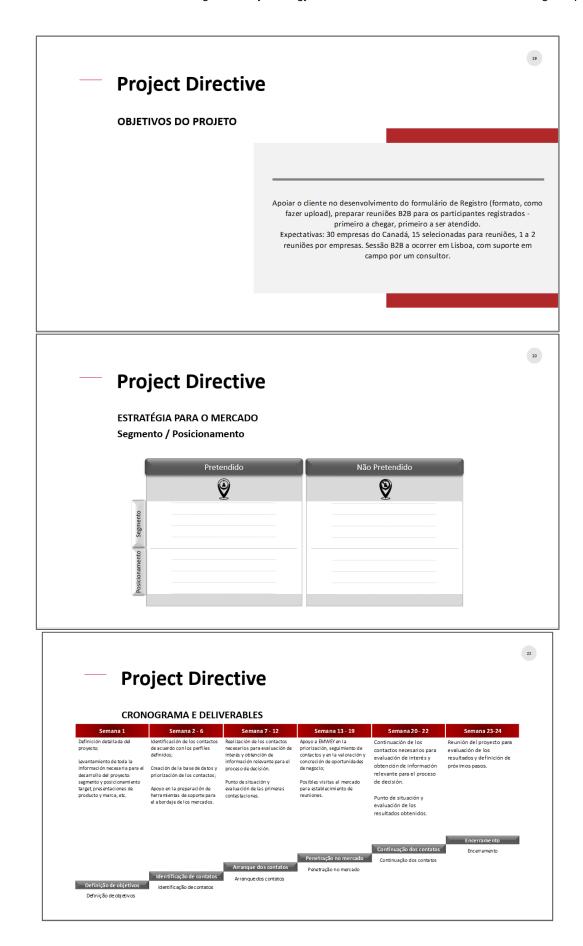


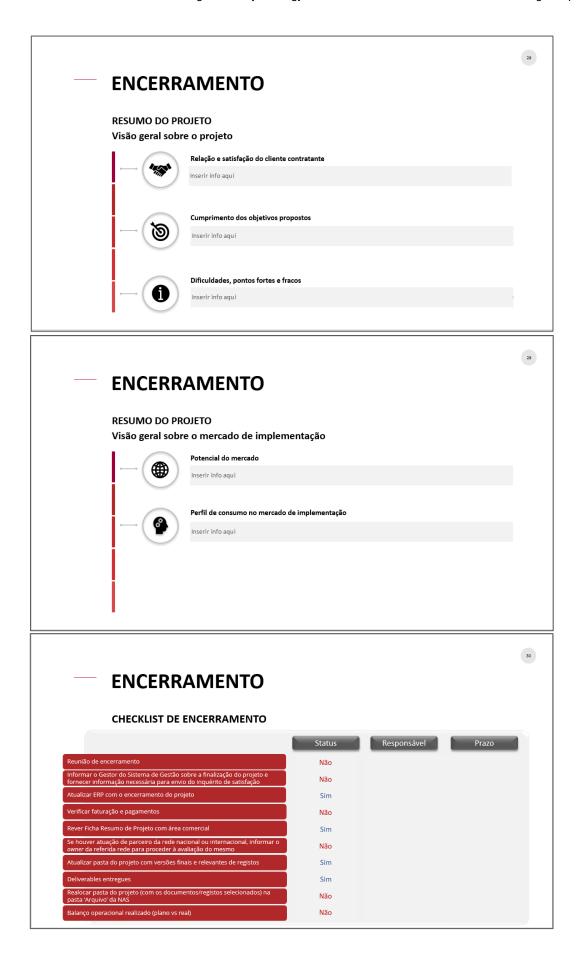
## APPENDIX H: Order Directive presentation template - main slides











# **APPENDIX I: Business Meeting Support Document Template**

			BUSINES	S MEETIN	G SUPPOR
Client	What it does	Diferentiation	Operational capacity	Financial capacity	Customer segment
Profile	- What is the product/service	- Competitive advantages	- Deadline compliance histo	- Financing ory existence	- What is the target customer
	- Product availability	- Main competitors	- Installed capaci	ty - Financial stability	- Current channels
	- Product sold in the home country?				- Main clients
International	International presence	International maturity	International	l Knowledge of	Marketing mix
Context			- Commercial tea		VIII-
	- Presence in the target market	- Competitive products abroad	dedicated to the	m - Market study carried out	<ul> <li>Local regulations compliance</li> </ul>
	- Export experience of the management	- International aftersales capability	international market	- Target market knowledge	- Packaging, promotion material adaptation
	team	- International	<ul> <li>International experience of Sal</li> </ul>	es - Regulation/	- Pricing
		market share	and Operational teams	taxation/ culture knowledge	- Existing partners
	Problem	Opportuni	tion	Goals	Relevance
all in the	A ODJETT	Оррогин	lica	Guala	to the client
Objectives	- Problems to be solved	- Opportunities be achieved	qui (nu me	xpected antitative goals umber of eetings, clients, is etc)	- What is valued and not valued in the project

### **APPENDIX J: Kick-off Meeting Support Document Template**

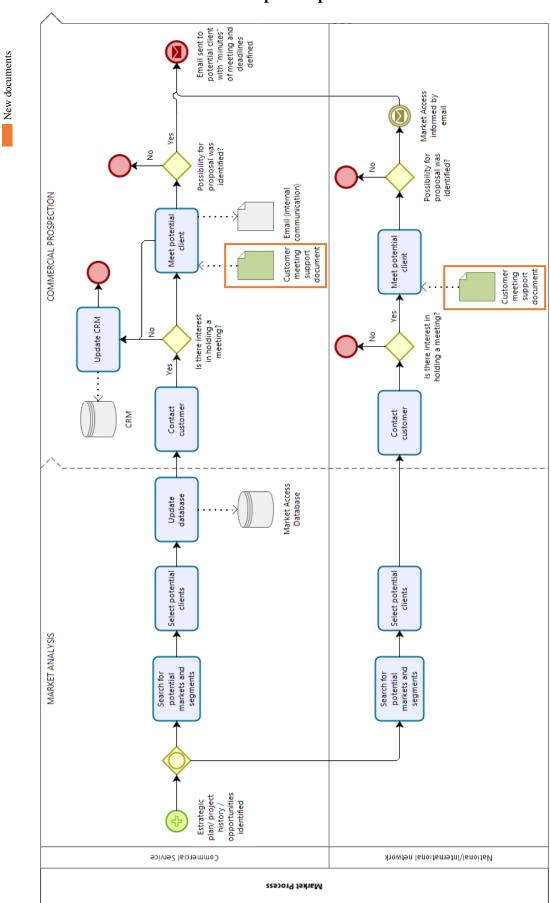
Presentation / printing format



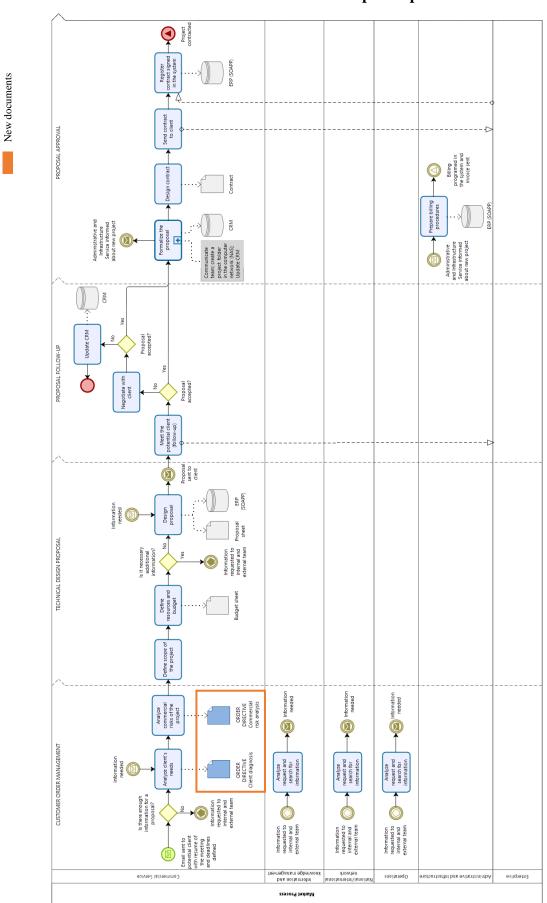
Scheme attached in the "Order Directive data input file"



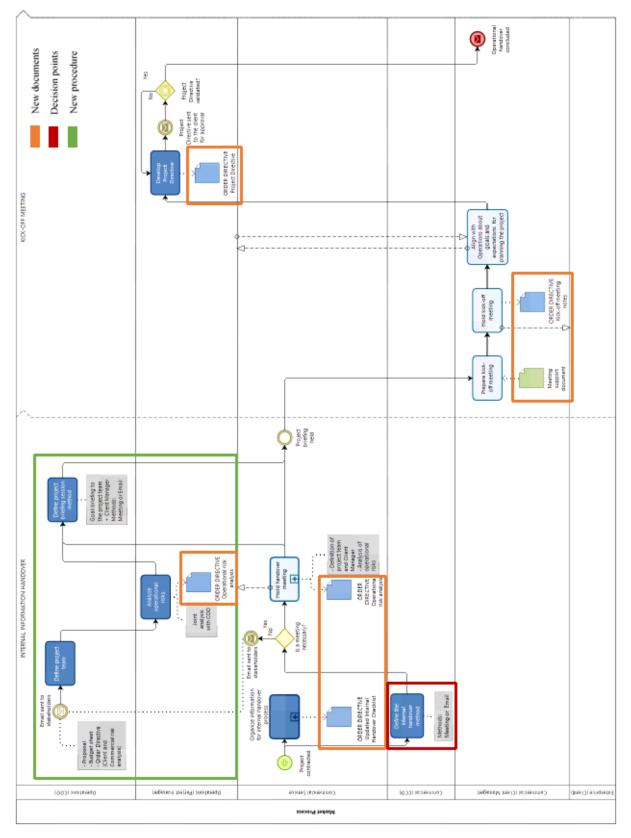
## APPENDIX K: To-Be swim lane - Prospection phase



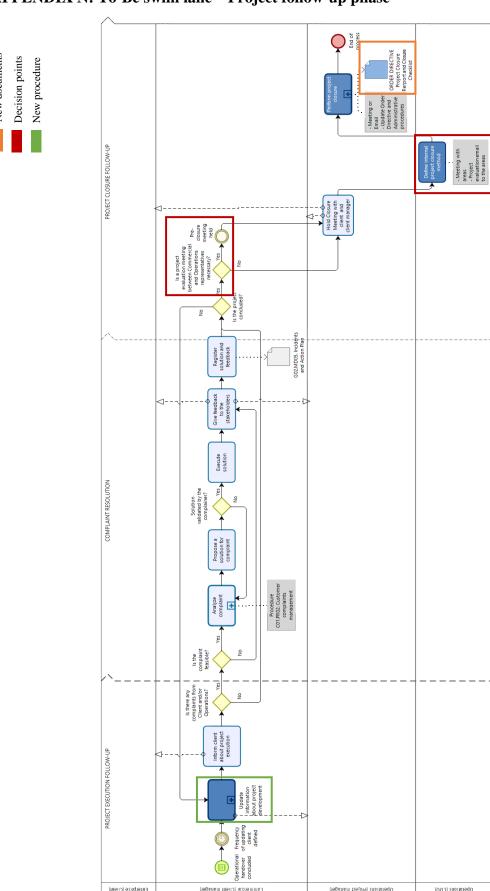
## **APPENDIX L: To-Be swim lane – Commercial development phase**



# APPENDIX M: To-Be swim lane – Operational handover phase



# APPENDIX N: To-Be swim lane – Project follow-up phase



## **APPENDIX O: To-Be work instructions - Commercial prospection**

### Instrução de Trabalho - Prospeção comercial

#### Objetivo

Definir etapas para realização da prospecção comercial

#### Âmbito

Possibilitar que a equipe comercial realize um diagnóstico completo do cliente a partir da reunião comercial realizada

#### Descrição

#	Tarefa	Descrição	Doc. Suporte	Responsável
1	Contato com cliente	Efetuar contato direto com pessoas-chave em empresas/entidades públicas via email ou telefone para apresentar os serviços da MA, podendo ser inserido, no caso de email, apresentação institucional. Ao ser demonstrado interesse em conhecer os serviços da MA.	- Base de dados Market Access	Mercado
2	Agendamento de reunião	Havendo interesse por parte do cliente em reunir com a MA, agenda-se reunião presencial ou virtual, utilizando o Google Meet para agendamento, enviando email convite da reunião a todos os participantes.		Mercado
3	Reunião com cliente	Utilizando o documento de suporte à reunião comercial (anexo) disponível na NAS e na caixa de email de cada funcionário da área de Mercado, conduzir a reunião com cliente no dia e hora agendados e apontar durante ou logo após a reunião as informações levantadas.	- Documento de suporte à reunião com cliente - Base de dados Market Access	Mercado
4	,	Enviar email à sua equipa de Mercado (nacional ou internacional) com briefing da reunião, contendo os principais tópicos levantados e informando do interesse ou não sobre o desenvolvimento de uma proposta e/ou posterior contato de follow-up.  Caso haja tal interesse por parte do cliente, enviar email ao cliente no mesmo dia da reunião informando os pontos tratados na reunião e previsão de envio da proposta ou agendamento de próximo contato.	- Notas da reunião com cliente	Mercado
5	Update CRM	Atualizar o CRM da empresa com informações da empresa contatada e breve feedback sobre a reunião	- Notas da reunião com cliente	Mercado

### Informações e instruções sobre os documentos

Documento de suporte à reunião comercial com cliente

Alocação dos documentos: arquivo individual disponível na NAS e em email dos funcionários da área de Mercado; inserido também no Order Directive\_data input para permitir várias fontes de consulta.

#### Anexos

Anexos	Descrição
Doc de suporte à	Documento contendo tópicos essenciais a serem abordados na reunião com cliente e sugestões de questões a
reunião com cliente	serem perguntadas

Sigla	Descrição	Sigla	Descrição
MA	Market Access		
NAS	Rede interna da Market Access		

#### APPENDIX P: To-Be work instructions - Kick-off meeting

#### Instrução de Trabalho - Reunião de Kick-off

#### Objetivo

Definir etapas para realização da reunião de kick-off

#### Âmhita

Garantir eficiência na condução da reunião de Kick-off, qualidade na recolha da informação do cliente e no alinhamento de objetivos e expectativas do projeto.

Des	crição			
#	Tarefa	Descrição	Doc. Suporte	Responsável
1	Preparar reunião	Preparação da KOM com base no documento de suporte para esta reunião e nas informações existentes da fase de Prospecção e Passagem Interna.  Agendar reunião, registar o evento no Google Meet e enviar email convite aos stakeholders.  Atualizar data planeada no arquivo "Controle de Propostas/Projetos".	- Documento de suporte à reunião de Kick-off - OD_Prospecção Comercial - OD_Passagem interna - Normas e regulamentos locais - Controle de Propostas/Projetos da área de Mercado	Mercado
2	Realizar reunião	Conduzir reunião e efetuar anotações durante e/ou após a KOM no campo específico para esta atividade do arquivo Order Directive_data input.xls (anexo), de forma a evitar perda de informação relevante ao projeto.  Atualizar data real da KOM no arquivo "Controle de Propostas/Projetos".	- Documento de suporte à reunião de Kick-off - OD_Diagnóstico do cliente - OD_Riscos comerciais - OD_Riscos operacionais - Controle de Propostas/Projetos da área de Mercado	Gestor do cliente Gestor do projeto
4	Alinhamento final pós KOM	Alinhamento e conclusões finais sobre todos os objetivos e expectativas do cliente, tendo por base a informação recolhida e a análise de riscos realizada, de modo a que não restem questões relativamente a estes pontos.	<ul> <li>Notas da KOM</li> <li>OD_Diagnóstico do cliente</li> <li>OD_Riscos comerciais</li> <li>OD_Riscos operacionais</li> </ul>	Gestor do cliente
5	Project directive	Com todas as informações das fases anteriores do OD em mãos, o GP desenvolverá o Project Directive (anexo), preenchendo as informações das seções Análise do Cliente, Objetivos e estratégias do projeto, Cronograma e deliverables, Equipa do projeto (completar com informações dos representantes do cliente) e Notas adicionais necessárias.  Envio do Project Directive ao cliente para validação, o qual terá prazo de 3 dias úteis para responder. Caso não haja resposta, será considerado validado o escopo e o início da execução do projeto estará autorizada.	- Notas da KOM - OD_Diagnóstico do cliente - OD_Riscos comerciais e operacionais - Históricos de projetos e clientes - Normas e regulamentos locais	Gestor do projeto

#### Informações e instruções sobre os documentos

#### Documento de suporte à KOM

Alocação dos documentos: arquivo individual disponível na NAS e em email dos funcionários das áreas de Mercado e Operações; inserido no Order Directive\_data input e Order Directive (versão apresentação), para permitir várias fontes de consulta.

Order Directive\_data input: Arquivo MS Excel; Order Directive (versão apresentação): Arquivo MS Powerpoint

#### Alocação dos documentos

Ambos os documentos (Excel e Powerpoint) devem estar alocados na mesma pasta.

Após adjudicação da proposta: será criada uma pasta na NAS para o projeto adjudicado com título da proposta do projeto que será alocada na pasta "Projetos em execução" na pasta do processo Operações. A pasta do Order Directive será reencaminhada para este endereço.

#### Títulos dos documentos

Order Directive data input: não deve ser renomeado, a fim de não perder os vínculos definidos com o arquivo MS Powerpoint.

Order Directive (versão apresentação): pode ser ou não renomeada (preferencialmente não).

<u>Pasta contendo os 2 arquivos (Excel e Powerpoint)</u>: Após emissão de uma proposta, o título deverá ser alterado para o número da proposta + nome da empresa. Este será o título final do documento (Exemplo: 20200123\_XYZ Indústria).

#### Instrução de preenchimento

O preenchimento deverá ser feito exclusivamente no arquivo **Order Directive\_data input**. As células do arquivo encontram-se bloqueadas para formatação, inserção e eliminação de células, linhas e colunas, sendo permitido apenas inserir dados nas células definidas para receber informação e, assim, gerar o arquivo de apresentação do Order Directive de forma padronizada.

#### Instruções para extração de relatórios do Order Directive

Project Directivepode ser diretamente extraído do arquivo Order Directive (ppt) selecionando os slides relativos a este relatório.

Criação do arquivo Project Directive para envio ao cliente: abrir um arquivo MS Powerpoint novo (em branco) e abrir o arquivo MS Powerpoint Order Directive do projeto em questão. Neste selecionar as miniaturas dos slides 1, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 e 35, clicar com botão direito e selecionar "Copiar". No arquivo em branco, clicar com botão direito na miniatura do único slide presente no arquivo, escolher opção "Colar (Manter formatação original)". Eliminar o primeiro slide em branco e Salvar o arquivo como PDF.

#### Anexos

Anexos	Descrição
Doc de suporte à reunião Kick-off	Documento contendo tópicos essenciais a serem abordados na reunião com cliente
Order Directive	Documento representativo do roteiro do projeto a ser preenchido à montante pelas áreas de Mercado e Operações de acordo com a evolução do pedido, desde a prospeção ao fecho do projeto. Composto por um arquivo em formato MS Excel para input dos dados e um arquivo no formato MS Powerpoint como versão final não editável, para consulta e extração de relatórios.
Project Directive	Documento que reúne o escopo incluído e excluído do projeto, prazos, deliverables, equipa envolvida que representar o plano diretor do projeto para ser enviado ao cliente para validação antes de iniciar a execução dos serviços.

100000		Descrição	Sigla	Descrição
	GC	Gestor do cliente	MA	Market Access
	GP	Gestor do projeto	NAS	Rede interna da Market Access
	KOM	Kick-off meeting	OD	Order Directive

### APPENDIX Q: To-Be work instruction - Customer order management

#### Instrução de trabalho - Gestão do pedido do cliente

#### Objetivo

Definir sequência de realização da gestão do pedido do cliente

#### Âmhita

Viabilizar diagnóstico correto para o cliente, apresentando uma proposta comercial com maior probabilidade de aprovação, além de conduzir o processo até a adjudicação com excelência e foco no cliente.

#### Descrição

#	Tarefa	Descrição	Doc. Suporte	Responsável
1	Verificar necessidade de informação adicional Analisar se informação obtida até o momento é suficiente para realizar a análise do cliente e de riscos.  Quando for necessário, solicitar informação à equipa interna MA (Operações, Gestor de informação e conhecimento) ou externa (rede)		- Notas da reunião com cliente - Normas e regulamentos dos mercados de origem e alvo - Histórico de projetos e clientes	Mercado
2	Analisar necessidades do cliente	Analisar os apontamentos da reunião com cliente e preencher os campos relativos aos Diagnóstico do cliente (seu perfil, objetivos e contexto atual do negócio) do Order Directive_data_input (anexo).	- Notas da reunião com cliente	Mercado
3	Analisar riscos comerciais	Realizar análise preliminar de riscos comerciais classificando- os de acordo com os critérios evidenciados na reunião com cliente e adicionar informações/conclusões que achar pertinentes, preenchendo as informações no arquivo Order Directive_data input.xls.	- Notas da reunião com cliente - Normas e regulamentos dos mercados de origem e alvo - Histórico de projetos e clientes	Mercado

#### Informações e instruções sobre os documentos

Order Directive\_data input: Arquivo MS Excel; Order Directive (versão apresentação): Arquivo MS Powerpoint

#### Alocação dos documentos

Ambos os documentos (Excel e Powerpoint) devem estar alocados na mesma pasta.

<u>Fase inicial de diagnóstico e pesquisa</u> (antes da emissão da proposta): pasta de um novo Order Directive ficará alocada no seguinte caminho na NAS: Pasta "Mercado" >> Pasta "Desenvolvimento de leads".

Após emissão da proposta: a pasta do Order Directive estará alocada no seguinte caminho na NAS: Pasta "Mercado" >> Pasta Após adjudicação da proposta: será criada uma pasta na NAS para o projeto adjudicado com título da proposta do projeto que será alocada na pasta "Projetos em execução" na pasta do processo Operações. A pasta do Order Directive será reencaminhada para este endereço.

#### Títulos dos documentos

Order Directive data input: não deve ser renomeado, a fim de não perder os vínculos definidos com o arquivo MS Powerpoint. Order Directive (versão apresentação): pode ser ou não renomeada (preferencialmente não).

<u>Pasta contendo os 2 arquivos (Excel e Powerpoint)</u>: Após emissão de uma proposta, o título deverá ser alterado para o número da proposta + nome da empresa. Este será o título final do documento (Exemplo: 20200123\_XYZ Indústria).

#### Instrução de preenchimento

O preenchimento deverá ser feito exclusivamente no arquivo **Order Directive\_data input**. As células do arquivo encontram-se bloqueadas para formatação, inserção e eliminação de células, linhas e colunas, sendo permitido apenas inserir dados nas células definidas para receber informação e, assim, gerar o arquivo de apresentação do Order Directive de forma padronizada.

#### Anexos

Anexos	Descrição
Order Directive	Documento representativo do roteiro do projeto a ser preenchido à montante pelas áreas de Mercado e Operações
	de acordo com a evolução do pedido, desde a prospeção ao fecho do projeto. Composto por um arquivo em
	formato MS Excel para input dos dados e um arquivo no formato MS Powerpoint como versão final não editável,
	para consulta e extração de relatórios.

0000000	Sigla	Descrição	Sigla	Descrição			
00000	MA	Market Access					
00000	NAS	Rede interna da Market Access					

#### APPENDIX R: To-Be work instructions - Internal information handover

#### Instrução de Trabalho - Passagem interna

#### Objetivo

Definir etapas para realização da passagem interna

#### Âmbito

Viabilizar que a informação sobre o projeto adjudicado seja repassada com máxima qualidade e transparência.

#### Descricão

	criçao	·	Ţ	
#	Tarefa	Descrição	Doc. Suporte	Responsável
1	Organizar informação para P.I.	Garantir que as ações do checklist de Passagem Interna estejam cumpridos: documentos e pastas corretamente alocados na NAS, processo de faturação, dados atualizados no SOAPP Atualizar Checklist no arquivo "Order Directive_data input.xls".		Mercado
1	Definir método de passagem	Analisar se as circunstâncias (urgência, complexidade) do projeto demandam passagem interna através de reunião com as áreas de Operações, Comunicação e Sistema de Gestão e Melhoria, ou se será realizada por email.	- OD_Prospecção comercial	ссо
2	Agendar passagem interna	Quando a PI for realizada por reunião, agendar reunião, registar o evento no Google Meet e enviar email-convite aos stakeholders. Atualizar data planeada no arquivo "Controle de Propostas/Projetos".	- Controle de Propostas/Projetos da área de Mercado	Mercado
3	Realizar passagem interna	Reunião  Equipa de Mercado conduz reunião para definição de GC, equipe do projeto e analisa riscos operacionais  Email  Equipa de Mercado:envia email ao COO, Business unit manager, Gerente de comunicação e Gerente de sistema de gestão e melhoria com Proposta, Ficha de orçamentação, Order  Directive_Prospecção Comercial anexos; Operações: COO define GP e equipa do projeto, GP analisa riscos operacionais. Atualizar data real da Pl (da reunião ou do envio de email) no arquivo "Controle de Propostas/Projetos".	- OD_Prospecção comercial - OD_Passagem interna - Normas e regulamentos locais (mercado-alvo e país de origem do cliente) - Controle de Propostas/Projetos	Mercado Operações
4	Definir método da sessão de briefing à equipa do projeto	Analisar se as circunstâncias (urgência, complexidade) do projeto demandam que a sessão de brifing do projeto à equipa seja através de reunião com participação do GP e GC, ou se será realizada por email.		coo
5	Realizar <i>briefing</i> à equipa do projeto	Repassar informações sobre o projeto para a equipa de execução e GC, quando este não for a pessoa envolvida nas fases anteriores do processo de Mercado (prospecção e adjudicação da proposta).  Quando o responsável comercial pelo projeto for também o GC, este estará responsável juntamente com o GP por realizar o briefing à equipe de projeto.  Briefing por reunião: GC e GP conduzem a reunião Briefing por email: GC envia email com explanação mais	- OD_Prospecção comercial - OD_Passagem interna	Mercado GP

#### Informações e instruções sobre os documentos

Order Directive\_data input: Arquivo MS Excel; Order Directive (versão apresentação): Arquivo MS Powerpoint

#### Alocação dos documentos

Ambos os documentos (Excel e Powerpoint) devem estar alocados na mesma pasta.

Após adjudicação da proposta: será criada uma pasta na NAS para o projeto adjudicado com título da proposta do projeto que será alocada na pasta "Projetos em execução" na pasta do processo Operações. A pasta do Order Directive será reencaminhada para este endereço.

#### Títulos dos documentos

Order Directive data input: não deve ser renomeado, a fim de não perder os vínculos definidos com o arquivo MS Powerpoint.

Order Directive (versão apresentação): pode ser ou não renomeada (preferencialmente não).

<u>Pasta contendo os 2 arquivos (Excel e Powerpoint)</u>: Após emissão de uma proposta, o título deverá ser alterado para o número da proposta + nome da empresa. Este será o título final do documento (Exemplo: 20200123\_XYZ Indústria).

#### Instrução de preenchimento

O preenchimento deverá ser feito exclusivamente no arquivo **Order Directive\_data input**. As células do arquivo encontram-se bloqueadas para formatação, inserção e eliminação de células, linhas e colunas, sendo permitido apenas inserir dados nas células definidas para receber informação e, assim, gerar o arquivo de apresentação do Order Directive de forma padronizada.

#### Anexos

Anexos	Descrição	-
	Documento representativo do roteiro do projeto a ser preenchido à montante pelas áreas de Mercado e Operações de acordo	manana
Order Directive	com a evolução do pedido, desde a prospeção ao fecho do projeto. Composto por um arquivo em formato MS Excel para input	-
	dos dados e um arquivo no formato MS Powerpoint como versão final não editável, para consulta e extração de relatórios.	

l	Sigla	Descrição	Sigla	Descrição	
l	CCO	Chief commercial office	NAS	Rede interna da Market Access	
l	COO	Chief operations office	OD	Order Directive	
l	GC	Gestor do cliente	PI	Passagem Interna	
l	GP	Gestor do projeto	SOAPP	ERP da Market Access	
1	MΔ	Market Access			

### APPENDIX S: To-Be work instructions - Project execution follow-up

### Instrução de Trabalho - Follow-up da execução do projeto

#### Objetivo

Definir etapas do follow-up da execução do projeto

#### Âmbito

Garantir excelência na comunicação entre as partes e resolução de desvios do projeto no acompanhamento da execução do projeto

#	Tarefa	Descrição	Doc. Suporte	Responsável
1	Definir estrutura do follow-up com cliente	Contatar cliente para verificar necessidade de follow-up mais frequente e/ou de informações além das definidas pela equipe de projeto e definir frequência e meio de contato a ser realizado para estreitar relacionamento com cliente durante execução do projeto.	- OD_Project directive	Gestor do cliente
2	Planear troca de informação necessária com Operações	Verificar frequência necessária de recebimento de informação sobre o projeto pela equipa de execução e alinhar com GP viabilidade desta comunicação, com recebimento de status atualizado via Relatório simplificado ou de outra maneira a definir entre ambos.		Gestor do cliente
3	Realizar ponto de situação com Operação	Analisar com GP os desvios, dificuldades internas da equipa e ocorrência de falhas por parte do cliente para que o GC atue na cobrança junto ao cliente. Ponto de situação poderá ser realizado presencialmente, por telefone, vídeoconferência ou email, caso necessário.	- OD_Project directive - Relatório simplificado	Gestor do cliente
4	Registo dos desvios ocorridos e oportunidades de melhoria	A fim de desburocratizar o processo, mas garantir a recolha e tratativa de informação e consequente geração de conhecimento, o GC apontará no arquivo Order Directive_data input (anexo) as ocorrências de falhas graves identificadas, de acordo com sua avaliação da gravidade, urgência e impacto do desvio para o projeto. Quando o problema for evidenciado pelo cliente, proceder-se-á o procedimento de Gestão de Reclamações (CO1.PRO2).	- OD_Project follow-up - CO1.PR02 Gestão de reclamações do cliente	Gestor do cliente
4	Informar cliente	Após ser atualizado das informações, contatar cliente conforme frequência definida, ou quando for necessário, para informá-lo sobre o projeto, solicitar feedback e quando for o caso, negociar e/ou cobrar cumprimento de ações ou abrigações a ele inerentes.	- OD_Project follow-up - OD_Project Directive	Gestor do cliente

#### Informações e instruções sobre os documentos

Order Directive\_data input: Arquivo MS Excel; Order Directive (versão apresentação): Arquivo MS Powerpoint

#### Alocação dos documentos

Ambos os documentos (Excel e Powerpoint) devem estar alocados na mesma pasta.

Após adjudicação da proposta: será criada uma pasta na NAS para o projeto adjudicado com título da proposta do projeto que será alocada na pasta "Projetos em execução" na pasta do processo Operações. A pasta do Order Directive será reencaminhada para este endereço.

#### Títulos dos documentos

Order Directive data input: não deve ser renomeado, a fim de não perder os vínculos definidos com o arquivo MS Powerpoint.

Order Directive (versão apresentação): pode ser ou não renomeada (preferencialmente não).

<u>Pasta contendo os 2 arquivos (Excel e Powerpoint)</u>: Após emissão de uma proposta, o título deverá ser alterado para o número da proposta + nome da empresa. Este será o título final do documento (Exemplo: 20200123\_XYZ Indústria).

#### Instrução de preenchimento

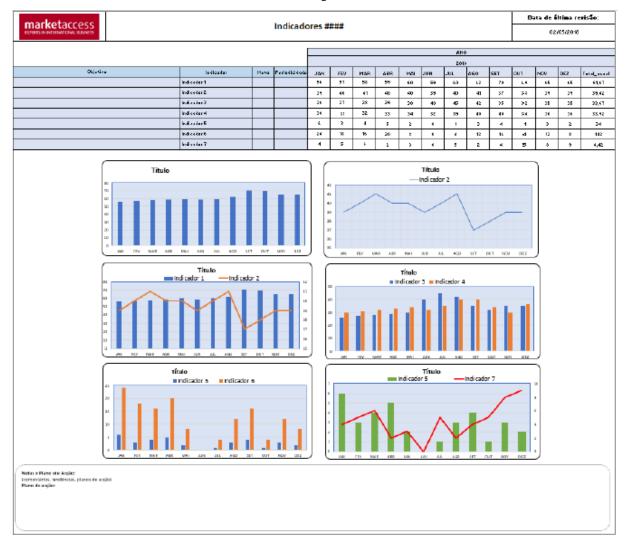
O preenchimento deverá ser feito exclusivamente no arquivo **Order Directive\_data input**. As células do arquivo encontram-se bloqueadas para formatação, inserção e eliminação de células, linhas e colunas, sendo permitido apenas inserir dados nas células definidas para receber informação e, assim, gerar o arquivo de apresentação do Order Directive de forma padronizada.

#### Anexos

Anexos	Descrição
	Documento representativo do roteiro do projeto a ser preenchido à montante pelas áreas de Mercado e Operações de acordo
Order Directive	com a evolução do pedido, desde a prospeção ao fecho do projeto. Composto por um arquivo em formato MS Excel para input
	dos dados e um arquivo no formato MS Powerpoint como versão final não editável, para consulta e extração de relatórios.

Sigla	Descrição	Sigla	Descrição
GC	Gestor do cliente	NAS	Rede interna da Market Access
GP	Gestor do projeto	OD	Order Directive
MA	Market Access		

## **APPENDIX T: Market Access Indicators Map**



# APPENDIX U: Proposed KPI fact sheet

		11-2-				Perfomance	e dimension	Temporal	dimension				
#	КРІ	Unit of measure ment	Metrics	Measurement frequency	Process	Effecti- veness	Efficiency	Leading	Lagging	Data source			
1	Total Revenue	€	Σ sales income of projects Sum of revenue of the company in a month It is compared to a sales income target defined by the company	monthly, annualized	Market		•		•	SOAPP			
	Drill-down criterion: type of project	%	Total revenue of the type of project / Total revenue Types of projects: Mission, Commercial development, Market study, Support in fairs/events etc	monthly, annualized	Market					SOAPP			
	Drill-down criterion: type of customer	%	Revenue from private entity clients / Total revenue Revenue from public entity clients / Total revenue	monthly, annualized	Market					SOAPP			
2	Export rate	%	Revenue of international projects / Total revenue International projects means the projects of clients outside Portugal KPI is compared to a profit target defined	monthly, annualized	Market		•		•	SOAPP			
3	Profit margin	%	((Total revenue - Costs)/Total revenue) * 100 It is compared to a profit target defined	monthly, annualized	Market		•		•	SOAPP			
	Drill-down criterion: Market segment	%	((Segment revenue - Segment Costs) / Segment revenue) * 100 Segments: National and International	monthly, annualized	Market					SOAPP			
4	Contribution margin	%	(Total revenue - (Costs + Expenses))/ Total revenue	monthly, annualized	Market		•		•	SOAPP			
5	Customer debts	€	Σ overdue billing of clients	monthly	Market		•		•	SOAPP			
6	Amount of commercial meetings by type of Market segment	%	Amount of meetings held by each segment / Total of commercial meetings held Segments considered: National private segment, National public segment, International segment	monthly	Market		•	•		Market area weekly report			
7	Database contacts growth rate	%	Number of new contacts added in the database from the last measurement / Total number database contacts	biweekly	Market		•	•		Market Access database			
8	Leads conversion rate	%	Number of proposals designed from the Prospection phase / Number of commercial meetings carried out	monthly, annualized	Market	•	•	•		Number of Proposals: SOAPF Number of meetings: Market area weekly report			
	Drill-down criterion: Market segment	%	Number of proposals designed by each Market segment / Number of commercial meetings carried out by each Market segment Market segments: National private segment, National public segment and Internacional Market	monthly, annualized	Market					Number of Proposals: SOAPP Number of meetings: Market area weekly report			
9	Client conversion rate	%	Number of proposals approved / Total number of proposals designed	monthly, annualized	Market	•	•		•	SOAPP			
	Drill-down criterion: Market segment	%	Number of proposals approved by each Market segment / Total number of proposals designed by each Market segment Market segments: National private segment, National public segment and Internacional Market	monthly, annualized	Market					SOAPP			
10	On-time proposal delivery rate	%	Number of proposals delivered on-time / total proposals delivered A deadline for sending proposal must be previously defined and registered in the Proposal control document	monthly	Market		•		•	Proposal/Project control document			
	Drill-down criterion: Market segment	%	Number of proposals delivered on-time by each segment / total proposals delivered by each segment Market segments: National private segment, National public segment and Internacional Market	monthly	Market					Proposal/Project control document			
11	On-time Kick-off meeting rate  Number of meetings held on-time / total meeting held  A deadline for holding the meeting must be provided by defined.		held	monthly	Market		•		•	Proposal/Project control document			
	Drill-down criterion: Market segment	%	Number of meetings held on-time by each segment/ total meeting held by each segment Market segments: National Market and Internacional Market	monthly	Market					Proposal/Project control document			
12	Average complaints resolution time (Client Manager)	days	Sum of times needed to the CM communicate and solve client complaints / Number of client complaint in the period.	monthly	Market	•	•		•	Order Directive_Project Follow-up			
13	Client manager performance satisfaction index	Integer	Average CM performance scores throughout the project, from the customer's perspective. From a scale of 0 to 10, where 10 is the maximum satisfaction and 0 the extreme dissatisfaction.	end of the project	Market	•			•	Customer satisfaction survey			

# **APPENDIX V: Adapted Proposal/Project control document**

	:												
20%	Cumprimento do prazo KOM (Sim / Não)	Sim	Não										
	Data real d	10/06/2020	12/06/2020										
	Data planeada para KOM	10/06/2020 10/06/2020	10/06/2020 12/06/2020										
	Gestor do Cliente	Ana	Maria										
20%	Cumprimento do prazo de envio da proposta (Sim / Nã∢▼	Não	Sim										
3,5	Prazo real de envio da proposta (dias)	4	3										
	Ano Mês planeado envio envio proposta proposta coloras (dias)	3	3										
	Mês envio proposta	9	9										
		2020	2020										
	Data real do envio da propos	05/06/5050	04/06/2020										
	Data planeada para envio da propos ▼	04/06/2020	04/06/2020										
	Data solicitação da propos∱	16 01/06/2020 04/06/2020 05/06/2020	60 01/06/2020 04/06/2020 04/06/2020										
	Duração do projeto (semarê)	16	09										
	Segmento (Nac / Int)	Nacional	Internacional										
	Tipo de serviço	Missão	DC										
	Região		Braga										
	Mercado- alvo	FR	Ы										
	Organização Mercado- alvo	AAA	XXX										

# **APPENDIX W: New process test plan template**

•	· OC	LOD CCD		710	•11	•	,	Ρ									
>		Alteração efetuada ?															
0		Alteração Alteração viável? validada? ?															
-		Alteração viável?															
S		Relação com cliente	S .														
J K L M N O P Q R S		Comunicação Registo Consulta Tempo de Relação Comunicação de dados informação tarefa cliente	N														
_	lhori	Ter ex o															
0 Z	Percepção de melhoria	Consulta de iformação	S .														
5	cepç	00 in	4														
_ _ _	Per	Regist de dad	S														
× -		municaçã	N/A ==														
		Feedback fornecido															
Ξ		Data Término															
9		Data início Término															
¥.		Função															
В		Executor															
D		Atividade															
-		ID Projeto															
0 8		# Pro	1	2	3	4	2	9	7	80	6	10	11	12	13	14	15