



# Universiteit Leiden

## ICT in Business

Automation technologies in the Sales Operations process

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# Abstract

Organizations are now maximizing their resources much by the implementation of new IT technology on different teams. Especially for groups such as sales, where significant investments are made in terms of automation with customer relationship systems. However, within a successful sales team the sales operations process also needs tools to automate certain activities and enhance their support in terms of effectiveness and efficiency. At the same time, there is a difficulty to select the correct automation method; even though an automated reply would be more efficient in terms of response time, it doesn't imply a meaningful impact in terms of effectiveness to the overall sales cycle. Therefore, the aim of this study is to explore the applicability of a process automation solution in the back-office operations process of a cybersecurity company. The specific argument is that the application of process automation principles such as Robotic Process Automation (RPA) and Business Process Management (BPM) could generate a change in the effectivity of the sales organization process

To reach an understanding of how the automation tools could influence the effectiveness, a case study design research approach was adopted. For data collection before the design, the qualitative method was implemented; a literature review using secondary sources was done, and semi-structured interviews were held with 7 experts in the field of cybersecurity sales. Prior to each interview, experts were elucidated about the current sales operation process (As-Is). The preliminary design has been created using automation principles described in the theoretical background and the result of the interview analysis about the process As-Is. An iterative design with four stages has been constructed with the feedback of professionals from the sales organization. Moreover, the observational method using case study was used to evaluate all the steps.

In this document, the resulting process automation framework is presented in terms of sales force effectiveness drivers and technological adoption principles, which if apply correctly could increase the effectiveness of the sales organization in terms of: sales force design, structure and roles, territory alignment, culture, sales managers, compensation and incentives, performance management and measurement, goal setting and forecasting, coordination and communication, operations, pricing and channel strategy.

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## Chapter 1 – Introduction

Customer's behavior is influenced greatly by the disruption of new technologies, it is easier to access different types of information and weight all possible options on the market. In addition, new internet services helped to push all this information to them by the use of smartphones anywhere at any time. With the propagation of e-commerce techniques, the time it takes a person from product exposure to purchase decision is a matter of minutes, all these have changed the customer perception of satisfaction (Fang, et al., 2014).

The behavior of individuals in the business to consumer (B2C) transaction is replicated on the business to business (B2B) world (Lemke, Clark, & Hugh, 2011). They have the same ability to weight products specifications, research into alternatives, compare customer service and explore other solutions about the challenges they face (Fang, et al., 2014). Not only they have more access to information any time anywhere, but they also have the same expectations towards the B2B sellers.

As a result, all sales representatives become customers themselves managing the front office of the sales team, dealing face to face with customers on a daily basis. Consequently, they embody client requirements translating needs into technical and commercial solutions, however, because they have this special set of skills, they need the support of a back-office sales organization. Therefore, the sales operations team is responsible for supporting the sales representatives with all the inquiries they have, and, at the same time, they need to keep the interest of the stakeholders involved into the delivery of the solution securing the maximum profit for the company without compromising the relationship with the external customer.

This new paradigm is especially true in the IT industry where disruption is practically the normal tendency, with this in mind, it is imperative to empower the sales team with the newest tools available and support it with the creation of flexible and effective processes (Skog, Wimelius, & Sandberg, 2018).

The sales operations process is wide and hard to define since they face daily challenges which may vary from common quote updates requests to sets of comprehensive data requests. In other words, the actions to solve the sales team requirements may vary from: following a specific pattern defined by the commercial policies of the company by applying the approved processes, to extracting data from different data points and creating an all-inclusive report for different managers to make business decisions and control the sales cycle. Consultancy firms like Deloitte study the spread of automation tools in different industries, in one of their articles they affirm that: “from a mid-table Fortune 1000 organization with around \$20 billion revenue and 50,000 employees, automating 20% of estimated addressable activity through RPA could result in over \$30 million of bottom-line impact each year” ( Deloitte NWE LLP, 2017).

### 1.1. The objective

This study targets to review the possibility to implementing an automation process system into the sales operation process to support the daily repetitive tasks which do not need a cognitive procedure and are part of the daily inquiries sent by the sales team. It is significant to identify what tasks fall into that category and why the use of this technology would improve the performance of the process. With the use of process automation technology, the interaction between requestor, systems and information will be better, faster and more reliable. However, it is important to remark that the ownership of the process is still on human hands. Therefore, it is important to identify the limits of the current technology and make the proper rules to avoid the misuse of the system.

This research will propose a process design which will focus on taking the repetitive non-cognitive tasks from the sales operation's members, breaking them free from repetitive manual duties and creating time for them to focus on cognitive work related to the delivery of important data to key stakeholders to managing the sales cycle. In effect, the sales operations team will have more time to help the sales representatives creating extra value to the relationship with external customers or partners by the effective delivery of information. The lead to cash process will be improved not only on time manners to attract new clients and secure the loyalty of current accounts, but also, once the customer is engaging and exchanging information the effectiveness of quotations will add value to the proposal that will satisfy the true needs no matter if the solution is a service, an equipment or a product mix.

## 1.2. Problem Statement

Any sales team has the challenge to discover and attract potential customers from different industries and regions, then at the same time, they need to identify and explore the needs of current accounts ensuring customer retention and managing the relationship. The significance of the sales force goes beyond its cost. The sales force is perhaps the most highly empowered organization within many companies because of its critical impact on customer relationships, its effect on top-line performance is significant. (Zoltners, Sinha, & Lomier, 2008). Every sales force has the opportunity to improve sales revenues through enhanced sales force effectiveness, these concepts have to be developed according to external and internal forces.

In the race to effectively improve the sales force according to internal forces, process automation technologies represent an attractive solution. However, it is a complex procedure that involves many systems with different capabilities and interfaces. It is also worth mentioning that those systems and capabilities need to improve the current process in the most productive way ensuring a balance between effectiveness, efficiency and investment. Therefore, the main challenges facing this process are:

- The different interactions between systems that sales operations use to deliver support.
- The expectations sales representatives have from sales operations process.
- The complexity of the requests sent by the sales front office team.
- Stakeholder satisfaction and accountability of the automated process.
- Traceability of transactions and the use of the data generated by the system.
- The creation of a new role to control the robots and translate business processes to logical processes.
- The reorganization of tasks for the sales operations team.
- The flexibility, the model needs to be resistant to change and updates.

The adoption of this technology reinforces the idea that the sales workforce needs to manage and translate the work of the other departments to create value for the customers, causing a rise in the importance of sales management to business (Ștefan & Crăciun, 2011). The interactions of the automation process will go beyond the sales organization structure, this means more stakeholders from other departments as finance could be included (Lacity, Willcocks, & Craig, Robotic Process Automation at Xchanging, 2015)

## 1.3. Research question

To what extent would the implementation of an automated support task system in a sales back-office process improve the effectiveness of a sales organization?

Secondary Questions

- To what extent would the implementation of an automated support task system in a sales back-office process improve the effectiveness of the sales operations support?
- What is the limitation of automation in the process To-Be?
- What is the impact of automation in the pre-sales and post-sales processes?

#### 1.4. Purpose of the Research

Information systems are implemented within an organization for the purpose of improving the effectiveness and efficiency of that organization (Hevner, March, Park, & Ram, 2004). The academic purpose of this research is to explore the idea of automation process in a specific organization such as the sales back office. Furthermore, it will provide meaningful insight into what type of tasks are suitable for automation and how, if automated, they could improve the effectiveness of the process. Technologies such as RPA and BPM presents an opportunity to take away the routine administrative work from the sales operations team and extend their work capacity and capability. Because the repetitive tasks would be managed by an automation system the human members of the team would have time to explore business intelligence tools and create comprehensive strategies. This would mean more time to scrutinize different data sources, create valuable information, display eloquent metrics and control the sales cycle more effectively. However, not all business processes are suitable for automation, to be adequate, they need to be composed of activities carried out regularly, do not require creativity, interpretation or decision making, repetitive tasks that are prone to errors because they are performed manually without interpretation (Aguirre & Rodriguez, 2017)

The application of such a solution could allow the organization to enhance the additional value delivered to customers creating a differentiator factor from the competitors, developing governance and compliance capabilities and creating value out of the analysis of internal and external data.

This research aims to develop an automation process framework to implement automation technology for the back-office processes of the sale workforce of a cybersecurity company, the selection of this industry is because the researcher had first-hand access to process and business information of Palo Alto Networks due to an internship in the EMEA Sales Operations team. The use of an automated process in the back-office could allow the following features:

- Explore the activities that follow a defined pattern based on rules and let the system handle them.
- No room for human interpretation of basic business rules, increasing the data quality.
- Time to process back office daily tasks would be reduced.
- Back-office service for the salesforce would be available 24/7.
- A complete overview of requirements and requestors behavior.
- More time for the sales operations team to focus on effectiveness drivers.
- More time to create comprehensive reports and dashboards such as scorecards and pipeline management.
- Enable the possibility to implement KPI definitions based on effectiveness measurements through the sales cycle.

This would provide the sales organization with enhanced governance over the existing domain capabilities, it offers a competitive position against competitors, enables greater efficiency in the utilization of resources and delivers customized commercial offers to key customers.



## 1.5. Academic and Professional Contribution

### Academic

There are published papers that speak about automation in services such as finance (Asatiani & Penttinen, 2016), insurance (Lacity, Willcocks, & Craig, Robotic Process Automation at Xchanging, 2015) and telecommunications industries (Lacity, Willcocks, & Craig, Robotic Process Automation at Telefónica O2, 2015), all of them focus on tasks where employees tend to expend time on repetitive tasks such as copying information from one system to another. However, in the existing literature review there are not cases about the sales organizations back-office, they mention this organization as a possible adopter. The contribution of this research is to show if the implementation of automation technologies can influence the effectiveness of the sales process.

The value of RPA has been explored in different manners, it has been reported as providing significant returns on investment, with O2 reporting that the automation of 15 processes using 160 robots resulted in 600–800% return on investment. No internal jobs were threatened at O2, although the automation made an impact on outsourced job levels (Lacity, Willcocks, & Craig, Robotic Process Automation at Telefónica O2, 2015). Successful process innovation in companies involves the development of a suitable business model, however, it is vital that the model can be resistant to change (Euchner & Ganguly, 2014). As organizations mature in business process management it is important to be aware of procedural questions, so it is critical the use of new mechanisms for planning and allocating resources and to have a clear governance structure to clarify decisions that enable the improvement and transformation of inter-functional and departmental processes (Association of Business Process Management Professionals, 2009). Knowing that change is inevitable, it is essential to investigate and analyze the actual performance and limitations of the current sales processes to be able to improve and provide ways, strategies, and models that companies can adopt to get all the benefits of a BPM approach and reach higher levels of customer trust and satisfaction

### Professional

Academic researchers can help educate potential adopters by objectively researching actual automation scenarios in the different organizations within a company, by assessing what the software can and cannot yet do, and by extracting lessons on realizing its value (Willcocks, Lacity, & Craig, 2015). The IT Function and Robotic Process Automation is worth to investigate since the competition may be getting ahead of you in terms of implementation of AI into the business processes, there is a risk to start to fall apart.

With the intensification of the globalization, the effective management and identification of key business processes became even more important, emphasizing that in order to achieve success it is crucial to understand the definition of a business process (Ko, Lee, & Wah Lee, 2009).

Researchers indicate that major changes to traditional sales strategies to increase the efficiency and effectiveness of the sales processes are crucial. (Paesbrugghe, Rangarajan, Sharma, Syam, & Jha, 2017). To survive and succeed in the current competitive markets, manage costs efficiently, raise brand awareness and improve the overall performance it is crucial to adopt new methodologies and approaches. Business process management is the main key to these changes. Over the past years, companies are increasing their focus on business processes. The sudden interest derives from the necessity to optimize business operations, reduce costs and consolidate organizations. At the same time, agility, integration, customer focus, performance, innovation and compatibility combined matches the dreams of every company. The possibility

of business strategy alignment, value chain, and business processes as well the development of action plans to overcome the goals and success are some advantages of the BPM discipline (Association of Business Process Management Professionals, 2009).

Customer satisfaction and retention are the reasons why it is important to change and restructure the sales organization. With the goals to reduce costs and increase profits, emerge the conclusion that the current processes are not fulfilling the actual company's needs (Paesbrughe, Rangarajan, Sharma, Syam, & Jha, 2017).

## 1.6. Limits

It is meant to define the role of the sales operation team within the sales department, basically, it handles part of the back-office requirements the sales representatives have throughout the lead to cash cycle. Therefore, this research will not explore the influence of process automation in the final client service perception, in fact, for the purpose of this study, the sales operations client is the sales representative, based on their feedback is that the effectiveness of the framework is measured.

Due to the novelty of RPA and because the business implementations are not mature enough to draw a significant conclusion in terms of time, it is possible that during the study period and presentation, there were some significant findings or advances in the field. To this end, it is worth noting that it is possible the findings of this thesis are already slightly outdated due to this fast pace.

Another important limit is the industry because the sales cycle of each industry varies in terms of time, effort and compensation, it is important to remark that the process described in this research are applicable to cases within the cyber-security and the SaaS industry. The main difference between this two is the business model and the pricing method, in the SaaS Industry there is not an actual delivery of equipment from the company to the client, in contrast, in the cyber-security there are physical equipment that needs to be installed and tested in the client's physical networks depending of the product or service specification. Moreover, the pricing of SaaS is not the same as the pricing method used to deliver equipment or firmware.

Additionally, this research only explores the impact of the automation tools in the effectiveness of the sales back-office process and not the selection of the tools, there are different vendors that provide RPA or BPM tools. Moreover, these tools would have to meet IT requirements and standards that the researcher did not have access to such as webserver configurations, CRM configuration and access and the SAP Hana management.

Lastly, this research will not explore the current IT infrastructure, because the study is performed in the EMEA region and the central IT department is in the US. The researcher did not have physical access nor information about the configuration of specific systems. However, the basic interaction between the automated tools and CRM system will be explained according to the characteristics explored in the conceptual foundation.

## Chapter 2 – Conceptual Foundation

### 2.1. Literature Review

This study used the ResearchGate database, Leiden University database and Google Scholar as the main source of scientific literature. The researcher also had access to many web pages, blogs and forums related to RPA, BPM and its various applications. The keywords used to search the databases were: RPA, robotic process automation, robotic process automation back-office, process automation, salesforce automation, automation sales management, RPA business process, sales cycle management, RPA implementation, BPM, business process management, sales operations back office and sales operations automation.

Business process automation is intrinsically related to the automation of ERP systems, this concept is explored in a paper from P. Samaranayake, the author proposes an integrated approach to process integration, automation, and optimization through enhanced business process models over ERP (including CRM). On their findings, they suggest reaching a flexible automation system it is fundamental to eliminate the hierarchical nature of process and data elements. However, on the suggestions part is stated this study is general and certain applications within the ERP system need to be explored further, only the pre-sales activities are explained in terms of the process (Samaranayake, 2009).

Other authors, as T. Kyheröinen, explores the crucial elements, or Critical Successful Factors, to implement RPA solution into a business case. There is an analysis of a travel request where data is extracted by Excel sheets and sent by the customer via email. It concludes that automation solutions need to be tailored and customized to adapt to the needs for each target process, in this case the target process concerned a project life cycle, there was no mention of the possibility to implement the solution into the sales cycle or the implications it would have on the back-offices process (Kyheröinen, 2018). Furthermore, concepts such as insource and outsource automation for the back-office process are explained by The Outsourcing Unit from The London School of Economics and Political Science. Assessments about the effect of business services automation on client organizations with the use of RPA and Cognitive Intelligence technologies with in-depth casework and interviews show much misunderstanding about RPA's attributes, and how RPA fits with corporate IT architectures, infrastructures, skills set, governance and security procedures (Willcocks, Lacity, & Craig, 2015). These researches draw conclusions that emphasize the early involvement of stakeholders and define the topics a process architect should follow to achieve the implementation of automation. They explain a better and faster work over real cases such as Telefonica O2, but it doesn't develop how these attributions make the process effective according to the stakeholders' interests, the conclusion and concepts can be used to develop a framework for the sales cycle. In fact, it assesses the effects of business services automation on client organizations, there are clear explanations about concepts such as insource and outsource for the back-office processes (Lacity, Willcocks, & Craig, 2015).

For example, in a paper that explain in which ways the customers, employees and other stakeholders benefit from automation tools, it is presented how the companies treat service automation to enabling a strategy that improves their current business activities. The study doesn't explore the sales cycle and the automation introduction over the back-office sales team, it doesn't explain if there is an efficacy improvement over the process (Lacity & Willcocks, 2016). Another paper by the same authors explores different concepts of RPA adoption to educate potential business users analyzes the robotic journey made by the company Xchanging from 2013 to 2015 from an academic point of view. One of the most important conclusions is that businesses have to prioritize where the RPA is going to be implemented efficiently,

therefore, the exploration of RPA in the back-office sales team makes an important contribution to the academic and business studies (Lacity, Willcocks, & Craig, 2015). Moreover, frameworks to transform Shared Services with Service Automation are explored in paper related to RPA and BPM technologies, they can provide an additional transformation lever to add centralization, standardization, optimization, offshoring labor arbitrage, one of the main thoughts is business units need to buy-in to RPA, there has to be a diagnosis and it has to be clearly defined within a process, this supports the idea that it is important to explore RPA in different stages of the sales cycle (Lacity & Willcocks, 2016).

Finally, the limits of the current RPA tools were explored, one paper about the automation of a financial sharing service at Royal DSM<sup>1</sup> provides lessons from real-life examples to create academic comments and give suggestions to create RPA value. It also explores the different phases DSM experience to apply the framework correctly. It suggests RPA is a long-term financial investment and it argues how RPA could be implemented in different financial services. On the conclusions it is mentioned that early problem definition and much pre-emptive focus, this supports the idea of a focused study based on the application of RPA in the sales cycle, especially on back-office services to improve certain aspects of the quotation process. (Lacity, Willcocks, & Craig, 2016)

Therefore, a closer look at the sales cycle was explored with author C. Silva who on 2018 published a paper that explores the sales management process and sub-processes clearly with concepts such as BPM. The writer identifies the burden of extra administrative activities in the sales presentation step. Concludes that the sales process is large, and depth analysis of the back-office is necessary. Moreover, it suggests models that enhance the current process in terms of quality, cost and time. There is a need to define whether these definitions have a bigger impact in terms of effectiveness. (Silva, 2018).

Definitions of Sales Force Automation and the interaction between software vendors, services providers and infrastructure of SFA were explored, in a paper called “Salesforce automation: Review, critique, research agenda” with the use of a literature review list 15 papers where SFA outcome is measured with different criteria, efficiency is mentioned in different chapters, but it is not properly defined within the sales cycle. The paper suggest several questions about future studies and one of them is “Which technology, people and process factors are important components of SFA implementations, and what impact do they have on SFA outcomes?”, this supports the necessity to explore different technologies such as RPA to check whether the different process could be automatized and how this would influence the concept of efficiency. (Buttle, Ang, & Iriana, 2006). Paper such as “The Design and Development of a Sales Force Automation Tool Using Business Process Management Software” explore an existing SFA system to identify requirements and create a tool that would improve the sales and marketing departments’ efficiency. In their definitions they define efficiency in the reporting feature are possible by automation. The idea to identify the whole process and identify the weaknesses enables users the ability to both forecasting and reporting functionalities so that the system can calculate statistics for the entire sales cycle. In turn, these statistics provide management with a valuable and efficient assessment to make the best decision over sales territories and strategies. There is room to explore the interpretation of efficiency from the sales representatives’ point of view, this will support the idea that automation could enhance different parts of the sales cycle (Baysan, et al., 2005).

A holistic approach to defining and assessing sales force effectiveness, the proposed framework claims to help to diagnose sales force issues and develop multidimensional solutions. One

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<sup>1</sup> <https://www.dsm.com/corporate/about.html>

challenge they mention is “How do you get a sales force to allocate time appropriately across products and customer segments? When are structure, incentives, or performance management the most appropriate solutions?”, this suggestion generates different approaches on time allocation and structures where RPA implementation could disrupt the current processes of the sales force (Zoltners, Sinha, & Lomier, 2008). For example, the importance of the design of territories and how it plays an important role in affecting the sales organization effectiveness. It is stated that there is a need for a control system. There is no mention of how the control system works or if automation can improve the control and distribution of sales territories (Fatima, 2017). Moreover, efficiency management can be achieved. It also calls researchers to investigate different effective drivers and reveal what ideas suit the process better and under which circumstances. (Zoltners, Sinha, & Lomier, 2008)

Finally, the effectiveness of a sales cycle is also defined as productiveness and automation systems in the CRM and the sales cycle enable organizations to automate sales activities and administrative responsibilities for the sales professional, leading to a more productive agenda perfect commitment alignment between immediate and upper management is most predictive of technology adoption and readiness for change, they have created 4 hypotheses based on Salespersons perceptions of management commitment and the impact of adoption. they showed that SFA adoption is influenced to a greater extent by salespeople's perception about the alignment, they argue that the greatest positive influences when both leadership bodies were perceived to exhibit higher levels of commitment to the technology adoption. However, this study does not examine whether there is a direct link between salesforce satisfaction and sales performance, this suggests an approach to review the technological impact on the effectiveness (Cascio, Babu, & Nacef, 2010).

## 2.2. Theoretical background

### 2.2.1. Business Process

Analyst Terry Schurter<sup>2</sup> defines (BPM) as a natural and holistic management approach to operating business that produces a highly efficient, agile, innovative, and adaptive organization that far exceeds that achievable through traditional management approaches

Business Process Management is considered the art and science to understand how work is performed in an organization and to understand it, is crucial to, first, understand the definition of a business process (Dumas, La Rosa, Mendling, & Reijers, 2012). A business process is a defined set of activities or behaviors with a beginning and an end performed by humans or machines that create value for the customer and have clearly defined inputs and outputs. It is considered the basic unit of business value in a company and his main objective is to achieve one or more goals of the organization (Association of Business Process Management Professionals, 2009).

BPM is a management discipline that relies on the assumption that organizational objectives can be better achieved through an effective business process management and to do that it is crucial to possess the three main pillars: processes, people, and technology. Considered a “body of knowledge” is mainly used to define best practices and principles (Moore, Benedict, Bilodeau, & Vitkus, 2013).

The main goal can be thought as steps to increase the efficiency and effectiveness of structural processes through improvement and innovation of different organizational structures (Schmiedel, Vom Brocke, & Recker, 2014). The execution of the BPM framework requires the

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<sup>2</sup> <http://tschurter.com/>

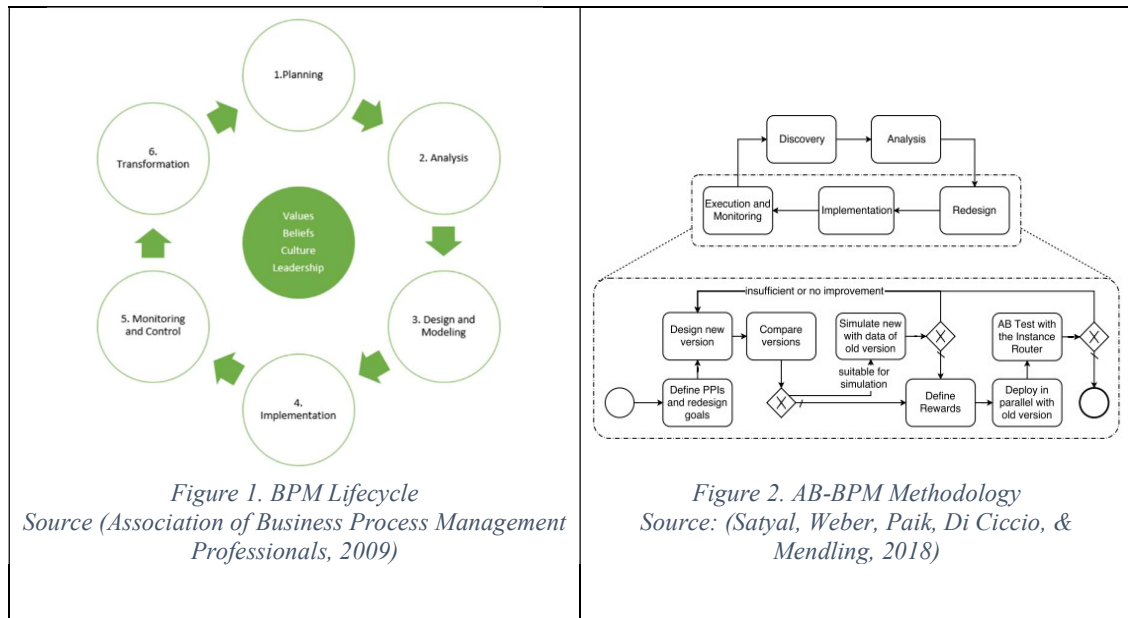
commitment of all the organization because it induces new roles, responsibilities, and tasks derived from the structure shift, this could be described as: from a vertical or functional focus to a horizontal or process focus (Schmiedel, Vom Brocke, & Recker, 2014).

Over the past few years, business process management is gaining a lot of attention and being recognized as a critical approach to support innovation, change management and transformation (Lemańska-Majdzik & Okręglińska, 2015). The framework strategy to apply the shift from a vertical to a horizontal distribution and the change of the thinking and working paradigm gives a special emphasis on processes, outcomes, and stakeholders (Tang, Pee, & Iijima, 2013).

To achieve BPM results successfully is necessary to take also in consideration some factors that include organizational, process, management, and technology practices (Association of Business Process Management Professionals, 2009) such as:



Defining the stages of a comprehensive BPM implementation, it is important to understand the lifecycle which was mentioned by various researchers. BPM is mainly a cross-discipline “theory in practice” subject involving knowledge from several areas such as organization management theory, mathematics, and linguistics. Given its multi-disciplinary nature, there are many views of the generic business process modeling lifecycle since each business reality, and each project is unique, it is impossible to predict how its implementation will be (Ko, Lee, & Wah Lee, 2009). The generic BPM lifecycle is known as a continuous and iterative lifecycle of integrated activities that include: Planning, Analysis, Design and Modeling, Implementation, Monitoring and Control and Transformation influenced by primary factors such as leadership, values, culture, and beliefs (Association of Business Process Management Professionals, 2009).



**Planning:** In this phase, a process-driven strategy and a plan are developed to set the goals, responsibilities, performance, methodologies, and direction to ensure the delivery of value to the shareholders and the strategy to handle shareholder’s expectation.

**Analysis:** During this phase, several points like business modeling objectives, business environment, the stakeholders and the modeling scope are analyzed (Dumas, La Rosa, Mendling, & Reijers, 2012). Within this phase it is important to check over current documentation and ask questions about the daily tasks that will be designed.

**Design and modeling:** In this stage, it is defined the organization’s expectations for this process and answers the questions: what, when, where, who and how its job is executed by the use of a responsibility matrix. The modeling software plays an important role where the flow of processes, actors involved, messages, notifications or other operational procedures are designed for a system that already exists or for a possible system (Juric & Sasa, 2009). Modeling purpose is to analyze in detail the drawings and to introduce combinations of variables, as a result, modeling will allow the evaluation of process consistency, it is important to understand how the process reacts to different circumstances or unforeseen scenarios (Hajiheydari & Dabaghkashani, 2011).

**Implementation:** In this phase, occurs the transition between the theoretical models to executable models, in other words, the processes are seen as mere abstractions become executable processes and the changes required to move from the “as-is” process to the “to-be” process are prepared and performed (Association of Business Process Management Professionals, 2009). The implementation involves two complementary facets: process automation that involves the configuration or implementation of an information system to support both “as-is” and “to-be” processes and organizational change management that are defined as the set of activities required to change the way of how things are being done by the actors involved in the processes (Dumas, La Rosa, Mendling, & Reijers, 2012).

**Monitoring and Control:** This is the stage where the monitoring of processes individually happens to identify necessary resources adjustments and generate performance statistics acquired through key measurements related to goals and value to the organization that can

result in improvement, redesign or re-engineering to better control the execution of the process (Association of Business Process Management Professionals, 2009). Likewise, the process flow needs a continuous measuring and monitoring to keep up with the ever-changing environment, customer needs, stakeholders' requirements and competitor's technological disruption (Dumas, La Rosa, Mendling, & Reijers, 2012).

Transformation: In this phase, the outputs and data of the iterative process lifecycle are implemented to optimize the information flow, in other words, process improvement. It is identified the possible organizational change management constraints and challenges to achieve process optimization, reduced execution time, human intervention and costs. Process optimization is managed to be able to respond to environmental changes and achieve consistent results.

### 2.2.2. AB-BPM Approach and Methodology

The AB-BPM methodology extends the redesign, implementation, and execution and monitoring phases of the business process lifecycle. This extension aims to provide support for rapid validation of process improvement ideas. Fig. 1 summarizes this methodology. AB testing compares two versions of a deployed product (e.g., a Web page) by observing users' responses to versions A & B and determines which one performs better (CrookT., Frasca, Kohavi, & R., 2009).

First, the redesign goal and the Process Performance Indicators (PPIs) are defined, followed by the design of the new version. Ideally this is followed by simulating the new version, using data from the old version. Simulation provides rapid feedback on the effect of the changes. However, it is not always possible to have a meaningful simulation: that requires the models to be reasonably similar to one another. If the models are too different (which is assessed in the step "Compare versions") If the models are similar enough for simulation, the simulation can have satisfactory results or not. In the latter case, the new version is further improved. It should be noted that simulation is always approximate, and the fuzziness of the results should be taken into account in this decision. Once the results are satisfactory, we advance to the AB testing stage. For AB testing, the PPIs are summarized in a numerical value that acts as feedback, or reward, which helps the instance routing algorithm make routing decisions during AB tests. Next, the new process version is deployed alongside the old version so that they run simultaneously in production. Finally, AB tests are configured and executed. The best performing version is automatically found by the instance routing algorithm. If the old version was found to be better than the new version, the new version is further improved and tested. (Satyal, Weber, Paik, Di Ciccio, & Mendling, 2018).

### 2.2.3. Sales Management

Selling is defined as the act of convincing people to satisfy a need or want and the exchange of something between two parties - the vendor (sales representative), and the buyer (customer) - for money "Selling is the act, sales are the result of this act" (Kundu & Bishnoi, 2009).

The concept of salesforce coordination and control is called Sales Management, which can be defined as "management of all marketing activities, including advertising, sales promotion, marketing research, physical distribution, pricing, and product merchandising" (Kundu & Bishnoi, 2009). It is also defined as "the planning, direction, and control of the personnel, selling activities of a business unit including recruiting, selecting, training, assigning, rating, supervising, paying, motivating, as all these tasks apply to the personnel salesforce" (Singh, et al., 2011).



It is also defined as “the planning, direction, and control of the personnel, selling activities of a business unit including recruiting, selecting, training, assigning, rating, supervising, paying, motivating, as all these tasks apply to the personnel salesforce” (Singh, et al., 2011). Similarly, sales management can be expressed as the control and form of personal sales contact, the sales system and distribution methods in global markets (Dannenberg & Zupancic, 2009).

The sales manager has the responsibility to guarantee that the sales activities generate the most effective contribution to the accomplishment of the organization goals and objectives, determine the goals of the salesforce, forecast and budgeting, salesforce selection, recruitment and training, motivating the salesforce team, organize the sales force size and planning and evaluate and control the salesforce (Jobber & Lancaster, 2009). The following are the main tasks of the sales management team:

- a. Planning: organizations must create some strategy to plan. First, they need to be aware of the future, the plan to reach business goals and decide who should do it, the stakeholders. Then develop a plan basing the assumptions of information from market research and studies, with this information they identify the competitors and the product mix. This plan should be flexible, continually updated and communicated to all people.
- b. Coordination: it involves principles and good practices to build up organizational skills, support the workers and help them to have a total vision of their activities and how to coordinate them with the team. The sales management team needs to motivate, develop a close relationship, promote direct contact among the organization and guarantee the flow of information about the objectives.
- c. Controlling: involves the continuous revision of the sales activity direction and the development of sales activities to support the organization objectives and goals. The sales management team needs to guide and lead the team to anticipate problems that can occur in the future and avoid them by taking corrective measures. In this phase, the budget and schedule are controlled, and the level of efficiency and effectiveness of the sales force are compared with yearly or quarterly forecasts.
- d. Motivating: only motivated salespeople can achieve business goals (Kundu & Bishnoi, 2009)(Kundu & Bishnoi, 2009). To unite different types of people in a team and leverage their productivity is a crucial task which needs to be analyzed and understood. The behavior patterns help to modify the strategy set on the planning.

Every organization has goals and objectives that aim to achieve. The most common ones are reasonable profitability, sales volume, market share, continuous growth, and good corporate image. All objectives have their importance. However, they must be represented in a measurable, quantitative way, must be realistic, achievable, integrated and organized in a hierarchical manner. They must be defined and formulated not only by the top management but must involve the salesforce and should only be defined after some studies and analysis of the market and trends. These objectives are affected by the efficiency and effectiveness of the sales management that helps the organization to achieve economies of scale (Singh, et al., 2011).

#### 2.2.4. Sales Effectiveness

The concept of “sales force effectiveness” is not well defined, having different meanings for different people. A vice president of sales might view effectiveness as “adding value to the customer beyond the product by changing the sales process from transactional to consultative.” A sales compensation analyst might view it as “increasing sales force morale and motivation through better incentive compensation programs.” A sales training manager might view effectiveness as “increasing salesperson competency through innovative training programs.” A

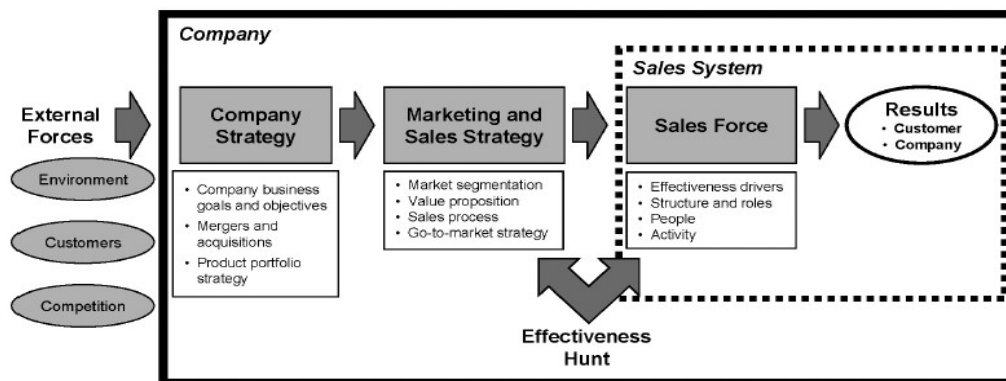
finance manager might view it as “increasing sales per salesperson” or “holding sales force costs below a benchmark percentage of sales.” There are three major reasons that academic focus on sales has not matched the level of practitioner interest. First, salesforce research is difficult because it cuts across many different disciplines. Second, many consider the sales function to be somewhat of an art and a mystery. Best-selling books on sales are filled with anecdotes and tips on how to be successful in sales, yet rarely does the popular press portray sales as a discipline backed by research, data, or frameworks. Finally, academics generally have poor access to sales organizations. Companies are reluctant to let researchers experiment with salespeople, most of whom are highly action-oriented and preoccupied with achieving their revenue goals.

The Salesforce Effectiveness Framework has been used to successfully diagnose problems, recognize opportunities, and adapt sales forces appropriately. In developing the framework, a simple picture is created to understand a complex definition. Hence, although the framework does not contain every nuance that exists in every selling organization, the major components and relationships evident in most sales organizations have been captured.

The framework is presented in two views. First, the Selling World provides a broad view that describes the role of the sales force within the context of the business. Second, the Sales System provides a detailed, decision-oriented view of the sales force and its role in driving results.

### The Selling World

The sales organization is affected by forces and decisions that originate within the company, as well as by forces that originate externally. Forces external to the company help to shape company strategies, which, in turn, affect marketing and sales strategies, which affect choices that determine what the sales force looks like. At the same time, companies hunt for effectiveness improvement opportunities within their sales organizations. Together these forces and decisions influence customer and company results (Zoltners, Sinha, & Lomier, 2008).



*Figure 3. The Selling World*  
Source (Zoltners, Sinha, & Lomier, 2008)

### The Sales System

The Sales System view within the Selling World breaks down the sales force and the results it creates into components to enhance decision making regarding sales effectiveness. The dynamics are shown in Figure 3. The major components of the Sales System are represented by shaded shapes and arrows. The components affect one another in a largely sequential fashion. Salesforce activities affect customer results, and customer results have an impact on company results. Meanwhile, the skills, capabilities, values, and motivation of the salespeople influence their behavior and activities. Salespeople work within a given structure and defined

sales roles. The sales force effectiveness drivers define the sales force structure and roles and help to shape the salespeople and influence their activities. The sales force effectiveness drivers are the final components of the Sales System. As described previously in the Selling World view of the framework, they are the basic decisions sales organizations make and the processes, systems, and programs they use to influence the structure, makeup, and the behavior of the selling team. The drivers fall into five categories. The definer drivers determine sales force structure and roles; the shaper drivers influence the salespeople who are part of the organization; and the exciter, enlightener, and controller drivers affect sales force activities.

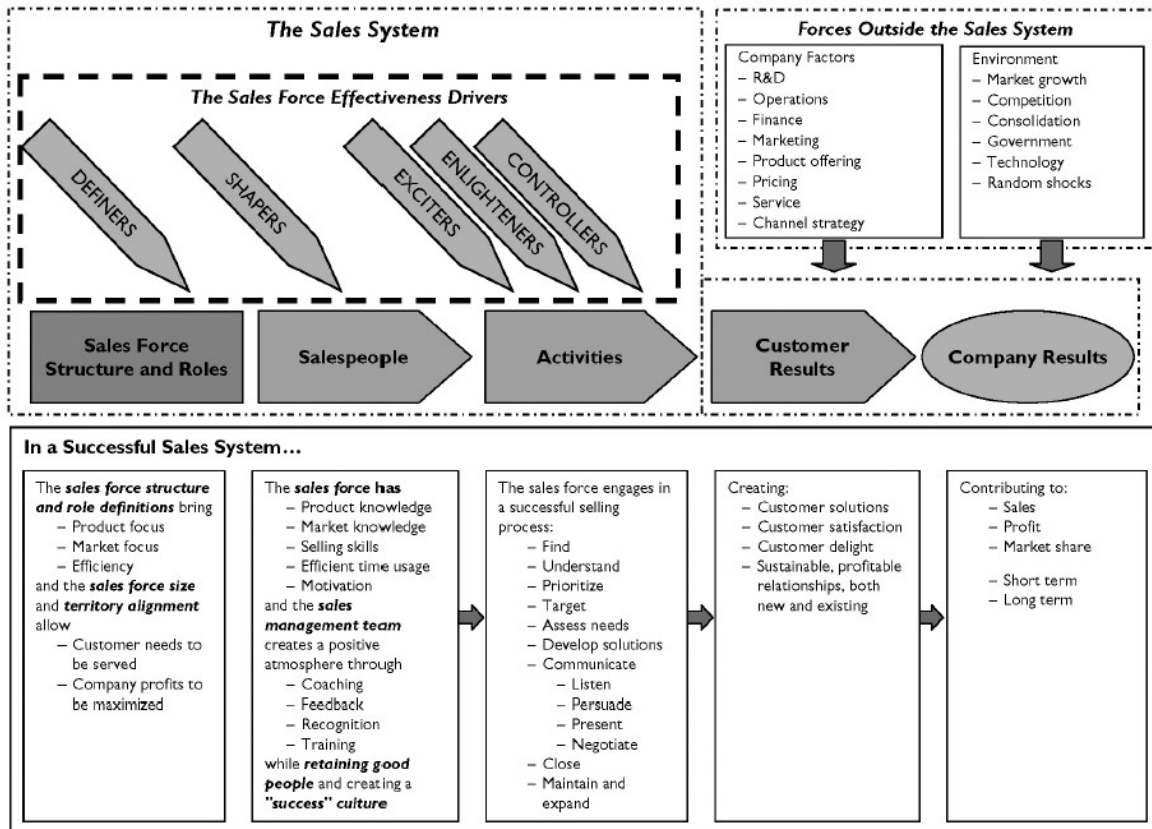
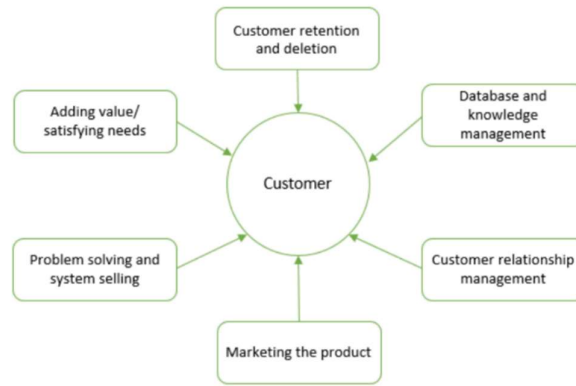


Figure 4. The Sales System  
Source: (Zoltners, Sinha, & Lomier, 2008)

### Characteristics of Selling

There are some essential characteristics of selling that the sales force need to know and engage with them to succeed in their job that is: customer retention and deletion, database and knowledge management, customer relationship management, marketing the product, problem solving and system selling, satisfying needs and adding value (Jobber & Lancaster, 2009).



*Figure 5. Characteristics of selling*  
*Source: (Jobber & Lancaster, 2009)*

1. Customer retention and deletion: it is known that 80 percent of the organization's sales come from 20 percent of their customers (Kotler & Keller, 2016). This means that the organization should dedicate some time and resources to identify, satisfy and retain highly profitable, valuable and high-volume customers. From that emerges the concept of key account management that allows sales team to target and serve a specific group of customers with complex needs and give them special treatment. However, organizations shouldn't focus only on their profitable customers but also analyze and identify the customers that cost more to retain than to generate profit. In that case, it is crucial to define a strategy and take actions to transform them into valuable customers or discard them (Kotler & Keller, 2016).
2. Database and knowledge management: the information gathered from customers, products and competitors should be stored in an organized, simple and integrated repository. Salesforce needs to be able to use and create databases to store information and generate knowledge from it. Nowadays, with the technological advances, it is easier to find information and communicate with customers and potential customers, so organizations should take advantage of that and store them electronically (Jobber & Lancaster, 2009).
3. Customer relationship management: The customer is always right, so the sales team need to focus on long-term and close relationships with customers and not only on closing the sale. The idea is that the organization start to create win-win interactions, where customers gain more trust and become loyalty (Beverland, 2001).
4. Marketing the product, the sales force is dealing with so much more activities than only planning and presenting the product or service to the customer, such other activities include product development, market segmentation, database management and data governance (Jobber & Lancaster, 2009).
5. Problem-solving and system selling: "Customers are increasingly looking for a systems solution rather than the buying of an individual product". Therefore, the sales force needs to communicate and follow the customer to identify problems, determinate needs and propose solutions. It involves multiple interactions, follow-ups and sales force analytical skills (Jobber & Lancaster, 2009).
6. Adding value/Satisfying needs and adding value: customers sometimes don't know they have a need, and in this type of situation is where salesforce enters. They should be able to identify customer needs and persuade them to be aware of that need. With that recognition "the salesperson will have added value to the customer's business by reducing costs and created a win-win situation for their company and the customer" (Jobber & Lancaster, 2009).

### 2.2.5. Sales Process

Every organization needs to identify and adopt guidelines and good practices for the standardization of their activity and the development of their employees as well as the organization. For this, they need to define processes that reflect key activities of each service provided as well as the industry where they belong. In the case of sales organizations, there are seven generic sales processes defined that are: prospecting, pre-approach, approach, sales presentation, handling objections and overcoming resistance, closing the sales and sales follow-up (Moncrief & Marshall, 2005).

Prospecting is the first step in an effective sales cycle and is defined as the search and identification of potential customers who may be interested in an organization's product or service (Moncrief & Marshall, 2005).

Pre-approach is the second step in the sales cycle and is defined as the set of activities that need to be performed and prepared prior to the contact with the potential customer. The approach is the third step in the sales cycle and is defined as the initial contact with the lead and its subsequent qualification (Moncrief & Marshall, 2005).

The sales presentation is the fourth step in the sales cycle and is defined as the conduction of one or more product/service presentations to the prospective customer. It starts with the analysis of the customer needs to be seen in the CRM system and by searching the company/organization's products and services to create an evaluation plan with all the options that fit what the customer wants (Kotler & Armstrong, Principles of Marketing, 2016).

Handling objections and overcoming resistance is the fifth step in the sales cycle and is defined as the identification and resolution of objections and resistance of the customers, that is, questions and hesitations regarding the product, service or organization (Moncrief & Marshall, 2005).

The close sale is the sixth step in the sales cycle and is defined as the completion of a sale of a product or service of an organization/company. Its main objective is to negotiate the terms and details of the sale and reach the agreement of both parties through a contract (Kotler & Armstrong, Principles of Marketing, 2016).

Post-sale follow-up is the seventh step in the sales cycle and is defined as being the constant follow up of customer experiences, motivations, desires, and needs. Its main objective is to create a relationship with the customer, maintaining constant contact to know if the product/service offered is in accordance with expectations. This process begins with making periodic follow-up calls and communications with customers to understand their concerns and answer their questions (Kotler & Armstrong, Principles of Marketing, 2016).

However, there are other authors who identify the generic sales processes as being: understanding the customer, approaching the customer, needs discovery, presentation, closing the sale and service and follow-up (Schuldt & Totten, 2015). By comparing the different processes, it is concluded that there are few differences between them, except for the given name and the exclusion of the process 'handling objections and overcoming resistance' (Schuldt & Totten, 2015).

### 2.2.6. Process Automation Concepts

KPMG coined the concept of Digital Labor as a technology that enables the automation of repetitive white-collar work<sup>3</sup>, it is interesting how they rephrased the “swivel chair” processes concept mentioned in other investigations and articles. The core of their concept is RPA described as a bridge between several disconnected systems (physical and logical) that each company has for example: CRM, SCM, PMO and Marketing Applications, which are constantly pulling information from different sources to provide a cohesive and comprehensive answer, delivering insightful and valuable information to main stakeholders.

Robotic Process Automation (RPA), rather than a physical robot, is a software-based solution to automate rules-based business processes that involve routine tasks, structured data and deterministic outcomes. RPA is suited to automating a process where a human take in many electronic data inputs, processes these data using rules, adds data and then enters this new information into another system, such as an enterprise or customer relationship management system (Willcocks, Lacity, & Craig, 2015).

Consider, for example, an accounting expert in the Accounts Payable Department in charge of the control of paid invoices for services and equipment. The recording of the invoice's information likely entails logging on and off different systems to input all the correct data for others to read. The main fields to check normally are the supplier's name, the supplier's bank account, the payment terms, the acceptance from the requesting department, the invoice amount, the exchange rate, the allocation of the cost and the validation with the Purchase Order. All these fields are filled following standard rules defined by the company's policy and local tax law. Now let's take out the human behind these tasks and place RPA software configured to perform according all rules what the accounting expert just did. By logging on and off systems with its own ID and password to perform thousands of invoices as a routine. That is basically what robotic process automation does. Interacts with other computers and systems, it can even read physical papers and contrast them with digital information just like a human would. If the RPA software is configured correctly it should be able to work faster and with lower error rate if compared with a human accounting expert. However, this leads to question what the human accounting expert would do, in fact, in this scenario the specialist would be free to focus on non-routine tasks.

While using software to automate work is not a new idea, recent interest in service automation has certainly escalated with the introduction of new technologies including Robotic Process Automation (RPA) and Cognitive Intelligence (CI) tools (Willcocks, Lacity, & Craig, 2015).

Chief Information Officers and other IT professionals need to ramp up quickly on what RPA can and cannot do for their organizations. They need to know how RPA can be leveraged for the long term, and the critical role IT professionals play in RPA success (Lacity, Willcocks, & Craig, Robotic Process Automation at Xchanging, 2015)

Robotic process automation is also defined as being a technological imitation of a human that automates rule-based business processes, structured, repetitive and non-value-added tasks in a fast, effective and cost-efficient way (Aguirre & Rodriguez, 2017). RPA could ensure a high return on investment because it aims to reduce the amount of repetitive and simple actions performed by humans, allowing the organizations to allocate their workers to perform main

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<sup>3</sup> <https://home.kpmg/us/en/home/insights/2017/10/robotic-process-automation-case-studies-for-tech-companies.html>

activities and with more value, since routine, manual and highly structured activities are the responsibility of a robot (Fung, 2014). RPA basically is executed over three stages:

1. Mapping of processes in a logical representation of rules and tasks. This helps to identify different inputs, process descriptions, system manuals and service descriptions and translate into the software language (Lacity & Willcocks, Robotic Process Automation: The Next Transformation Lever for Shared Services, 2016).
2. Testing, there is a pilot process, where robots are tested iteratively, under continuous improvement, to check if they perform the business tasks over their software environment. Moreover, new automated tasks need to be added gradually. At this stage stakeholders check and analyze over what the robots are capable of doing with tasks such as comparing information from various text files and spreadsheets (Lacity, Willcocks, & Craig, Robotic Process Automation at Telefónica O2, 2015).
3. The rollout, after the successful trial at the pilot process, robot software can understand and execute the tasks. Consequently, implementing robots in other areas and processes grows rapidly (Hallikainen, Bekkhus, & Pan, 2018).

Professionals from The Outsourcing Unit<sup>4</sup> are exploring the different implications of outsourcing services in companies around the world, one of their main results is that low-performing back offices can be transformed to high-performance through five main transformation levers: centralize physical facilities and budgets, standardize processes across business units, optimize processes to reduce errors and waste, relocate from high-cost to low-cost destinations, and technology enable with, for example, self-service portals. Further developments in automation, including software robots, have added a sixth lever. Clients report significant, multiple, often simultaneous benefits ranging across cost, process efficiency accuracy, regulatory compliance, speed, reliability, error reduction, and improved customer satisfaction (Willcocks, Lacity, & Craig, 2015).

According to the different experiences from The Outsourcing Unit and other automation projects the following concepts are present in the recommendations made by experts who implemented automated tools into business processes:

- **Prepare the IT department and Develop IT capabilities.** The OpusCapita case confirms that, when implementing RPA internally, the IT department needs to be involved in the development, testing and production phases of RPA. This involvement includes configuring applications and systems to allow robots to access them, developing a business case for the additional costs involved and developing support mechanisms, such as service desk support (Hallikainen, Bekkhus, & Pan, 2018).
- **Select Processes Carefully and Measure Improvements,** for RPA implementation processes should be selected carefully. Organizations should choose processes that are predominantly rules-based and require significant amounts of time and resources (Lowes & Cannata, 2015).
- **Re-Think Talent:** for the correct management of automation tools it is important to accomplish the creation of a high-performing organization that provides excellent service, enables the business to achieve strategic objectives, innovates quickly, scales nimbly, and meets all compliance standards. The organization should be focused on value-added tasks like strategy development, design of new services, judgment calls, and rich social interactions with internal and external customers. That is why rethinking talent is a crucial characteristic of an automated service center (Willcocks, Hindle, & Lacity, 2019).

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<sup>4</sup> <http://www.lse.ac.uk/management/research/outsourcingunit/>

- **The RPA Center of Excellence:** The Center of Excellence (CoE) is the preferred governance mechanism for designing, developing, maintaining and operating RPA. Leading organizations establish the CoE early, typically housing it in business operations (Willcocks, Hindle, & Lacity, 2019).

The Center of Excellence is the primary responsibility for the governing, designing and operating the automated system. One of the characteristics of this center is the governance, which needs to be seen in terms of three areas – technical, project and program governance. Effective RPA or BPM deployments invariably do project governance well it is important to remark there are two options to achieve project governance, one is creating a special role within the Center of Excellence, the other is a cross-team role from a member of the central Data Governance department (Willcocks, Hindle, & Lacity, 2019).

RPA activities need to be linked to wider IT, cognitive automation and digital transformation developments to achieve corporate coherence on technologies in the organization, and decisions need to be made in five major areas:

- Automation Principles – Clarifying the business role of automation technologies.
- Automation and IT/digital Architecture – Defining integration and standardization requirements.
- Automation and IT/digital Infrastructure – Determining shared and enabling services.
- Business Application Needs – Specifying the business need for purchased or internally developed automation applications.
- Automation Investment and Prioritization – Choosing which initiatives to fund and how much to spend.

RPA offers many advantages such as quality, accuracy and risk mitigation, multitasking, reduced cycle time, application integration via the user interface, cost and error reduction (Diepeveen, Matcher, & Lewkowicz, 2016), increased process speed and increased compliance (Aguirre & Rodriguez, 2017) due to its versatility and flexibility.

RPA is one step closer to a deeper thought, enabled by adaptive predictive power and exhibiting some degree of autonomous learning, the implementation of RPA also enables the possible use of machine learning technology, the main machine learning features are closely related to a mature RPA solution. The possible activities performed by this system are described in the following figure.

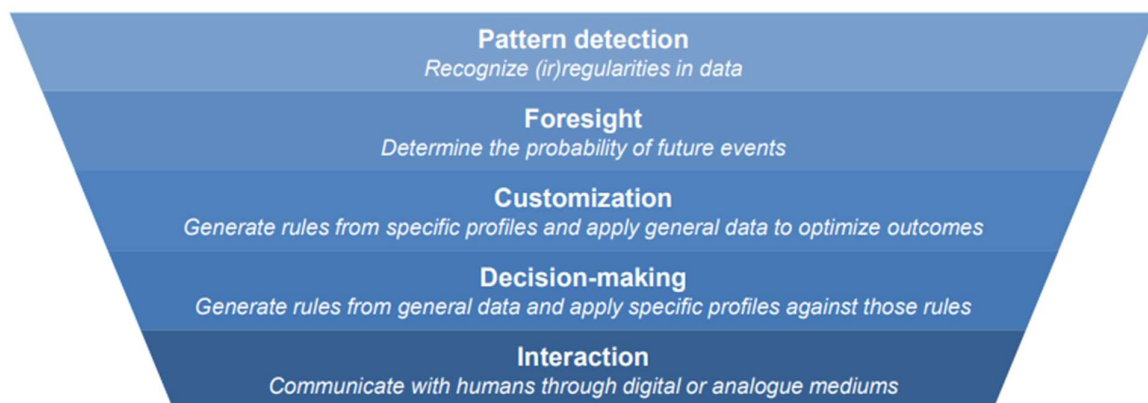


Figure 6. Machine Learning Features  
Source: (World Economic Forum, 2018)



A sales management information system it is part of a management information system, it is a set of business activities and operations connected with the delivery of goods and services to customers to provide the product, in a certain place, on the right time. It is composed of four business activities (Alianto, S., Wijaya., & Arlan, 2012), namely: Sales order, Delivery, Billing and accounts receivable and cash receipts.

It is also characterized as a system that integrates people, equipment and procedures to machines to deliver information to support the sales activity and is considered essential to run a business (Setiawati & Rohayati, 2014).

Lately, customers have become more demanding, informed and more complex. The need to present timely and accurate information, personalized services, market expertise and, at the same time, develop strong and lasting relationships with customers in a competitive environment implies the adoption and implementation of custom-design sales force automation tools (Boujena, Johnston, & Merunka, 2009).

Sales automation systems consist of computerized hardware, software, telecommunication devices to offer automated collection, analysis, assimilation and delivery of information to improve productivity, manage contacts, monitor customer relationships and sales processes, schedule meetings and track sales leads (Buttle, Ang, & Iriana, 2006) (Morgan & Inks, 2001). This information can contain market data, competition and customer profiles, pricing lists and any other data required to carry out the business where it is inserted. Consists of an integrated database system that can be accessed through a modem by remote access from a computer using SFA software. It allows a salesperson to get updated information in real-time for the performance of their duties (Buttle, Ang, & Iriana, 2006). It is also defined as being an information technology application that supports sales functions by improving the quality and speed of information flow across the organization (Boujena, Johnston, & Merunka, 2009).

With the emergence of the Internet and its connectivity, the world of sales as changed (Marshall, Moncrief, Rudd, & Lee, 2012). The possibility of reducing costs has led organizations to decide to focus on sales technology rather than people (Marshall, Moncrief, Rudd, & Lee, 2012). However, investing in technology is not enough. It is necessary to integrate sales technology with sales processes and human capacity to increase sales performance (Rodriguez, Ajjan, & Peterson, 2016), but also make this adoption useful and easy to use for sales person (Long, Tellefsen, & Lichtenthal, 2007). Sales technology is defined as any communication and technological information used by the sales organization to carry out its main activities (Rodriguez, Peterson, & Krishnan, Social Media's Influence on Business-To Business Sales Performance, 2012). Enabling accelerated mobility, productivity, and efficiency of salespersons, with the increasing difficulty in managing relationships with customers due to their strong interactivity with technology and the need to better understand customers, arise the need for integration of social media applications, internet of things and robotic process automation into sales management information systems (Rodriguez, Ajjan, & Peterson, Social Media in Large Sales Forces: An Empirical Study of the Impact of Sales Process Capability and Relationship Performance, 2016). that is integrated through front-end information systems, which is able to communicate with back-end information systems and can be integrated with any existing software in the organization (Aguirre & Rodriguez, 2017).

## Chapter 3 – Research Methodology

### 3.1. Research Design

This research uses the qualitative research methodology with a case study design as it develops an in-depth analysis of a case focuses on a single unit (Saldana, 2011), the single unit of analysis in this research is the “Sales Operation process” bounded by time and activity to the sales cycle management of a cybersecurity company called Palo Alto Networks. The case study qualitative research qualifies the researcher to study and to focus on a single process of a business cycle, in this case the sales cycle (Creswell, 2014) (Saldana, 2011). The goal of qualitative studies is to provide a rich, contextualized understanding of human experience through the intensive study of particular cases. The qualitative methodology was chosen for this research as there’s no need for result generalization in this view, generalization requires extrapolation that can never be fully justified because findings are always embedded within a context. According to this way of thinking, knowledge is idiographic (Guba, 1990) (Sun, 2009).

The objective of the research is to analyze and understand the applicability of process automation technology in the back-office process of the sales cycle, and how this technology influences the sales management process by increasing, decreasing and having no influence on the effectiveness. The statistical and numerical analysis performed around RPA and BPM demonstrated that robots react more efficiently than humans in departments of time and precision. However, to achieve a deeper understanding of the applicability of RPA and BPM technology in the salesforce it is necessary to analyze themes, patterns interpretation, with the use of interviews with subject matter experts on the sales process (as a data collection method) which enables the participants to describe their experiences, and points of view towards certain subjects. Qualitative research has its heredity in social science and is more concerned with finding out why people behave as they do. It is concerned with the knowledge, attitudes, beliefs, fears, etc. of people. Therefore, qualitative research expected interaction between the researcher and the subject (phenomena) (Sun, 2009). All these factors support the selection of the case study as an approach for this qualitative research.

The inductive logic of research for a qualitative study will be implemented in this study since the application of the RPA technology in the salesforce management domain of the cybersecurity industry is an innovative topic with much debate between scholars and limited literature. This study will look for broad patterns and theories from SFA and sales performance categories. The gathered data will be then categorized to define what topics give insights about the relation of RPA and efficacy.

The proposed research will be of exploratory nature where it will mainly depend on literature search, expert interviews with open-ended questions and records fields notes (Creswell, 2014) (Bücker, 2015). An advantage and uniqueness of qualitative research are that it lets the subjects being studied to provide with better and richer answers to questions given to them by the researcher based. These questions will be non-numerical data, interpretive and descriptive, based on the observation of a natural setting and In-depth description of a situation or observations of “natural setting”. (Bücker, 2015). Thus, it helps to go for effective insights that might have been ignored by any other method. It is said that qualitative researchers examine the ‘why’ and ‘how’ questions and not just the ‘what’, ‘where’, and ‘when’ questions. For this reason, qualitative researchers demand smaller but focused samples rather than large random samples (Hossain, 2011). Interviews with stakeholders/experts either management, staff or partners of exploratory nature to identify the key success factors that the technology need to provide, the structured interviews and questionnaire.

Most of the qualitative research studies depend on the interview as the main instrument to collect the data (Saldana, 2011). The interview enables the participants to share their stories, experience, and to have in-depth answers that focus on the participant's experience and opinion related to the research topic (Murtezaj, 2011). Interview formats can range from highly structured interviews to unstructured interviews (Saldana, 2011). Several factors affect the degree of structure in qualitative research such as the purpose of the study and the availability of the participants (Devers & Frankel, 2000). Another data collection method used in qualitative research studies is document analysis, which provides the opportunity to review the documents related to the topic under study (Creswell, 2014). These various methods are triangulated against one another to ensure the rigorosity of the study, as using more than one data collection method helps to decrease the weaknesses of any single approach (Aziz, 2013). In this case study qualitative research, the researcher used semi-structured interviews with participants; the participants were experts in their domain and the sales cycle of the cybersecurity industry, but they had little in-depth knowledge of RPA. The semi-structured interview enables the researcher to have more flexibility to start the interview with a brief introduction about the idea, objective of the research and to illustrate the concepts of blockchain technology. Document analysis method enabled the researcher to review the documents related to the research topic; document analysis was a secondary data collection method in this case study qualitative research.

### 3.2. Interviewee Selection

Because there is not a large universe of salesforce management experts willing to share their point of view and neither do they have the time to explore new ideas due to their business responsibilities, non-probabilistic sampling techniques rely more on the personal judgment of the researcher than the chance of selecting ample element (Malhotra & Birks, 2006). Probabilistic sampling is not suitable for qualitative research studies as the generalization concept ask to extrapolate the deductions of numerical data, these are not present in the type of research selected (Creswell, 2014). This study assumes that the researcher needed to understand, explore, and gain insights of the perception of effectiveness within the salesforce organization, thus the researcher must select the participants who would be able to provide the most insightful data and information. Participants were selected according to the research objective definition (in this case sales process effectiveness) and their ability to contribute to the research to explore the impact of process automation implementation (Aziz, 2013). It is said that qualitative researchers examine the 'why' and 'how' questions and not just the 'what', 'where', and 'when' questions. For this reason, qualitative researchers demand smaller but focused samples rather than large random samples (Hossain, 2011). There is a point of diminishing return to qualitative samples, as the study progresses more data does not necessarily lead to having new information (Mason, 2010). There is no specific number of interviews for qualitative studies; normally the sample size depends on the qualitative design being used (e.g., ethnography, case study). From instance narrative qualitative research studies include one or two individuals; phenomenology to typically range from three to ten; grounded theory, twenty to thirty; ethnography to examine one single culture-sharing group with numerous artifacts, interviews, and observations; and case studies to include about four to five cases (Creswell, 2014).

Defining sample size a priori is inherently problematic in the case of inductive, exploratory research, which, by definition, looks to explore phenomena in relation to which we cannot identify the key themes in advance. In such an approach, specifying a priori how many participants will be needed to create enough understanding of what is as yet unknown is, in its essence, illogical (Saunders, et al., 2017). Sample size to meet a study's aims is one that is

necessarily a process of ongoing interpretation by the researcher, therefore saturation approach suit better this case the concept of data saturation is where no new information or themes are observed in the data from the completion of additional interviews or cases, is a useful one in terms of discussing sample size in qualitative research (Boddy, 2016). Saturation, in qualitative data collection, is when the researcher stops collecting data because fresh data no longer sparks new insights or reveals new properties (Creswell, 2014). Code saturation indicates that the researcher has heard all the necessary information, while meaning saturation is needed to understand all the data, they also showed that: Nine interviews were needed to reach code saturation and 16-24 interviews were needed to reach meaning saturation ( Hennink, Kaiser, & Marcon, 2016). Most of the studies related to sample size in qualitative research provide guidelines without empirical arguments as to why certain numbers should be used when selecting the sample size (Mason, 2010).

The target participants for this research includes sales operation managers, sales representatives, sales territory managers and corporate governance managers. The interviews are face to face and on-line meeting with tools such as Skype and Zoom, some participants are located in the Netherlands and others are located across Europe, it is important to remark that the residence country of the researcher in the Netherlands. The sample size in qualitative research was irrelevant, as the aim was the participants were evaluated based on their ability to provide rich information rather than being a representative of a large group (Slevitch, 2011). The below criteria have been developed to ensure participants have adequate qualifications in terms of knowledge and years of experience in sales management, and sales operations to validate the solution design:

Experience Field	Years of Experience	Reasoning
Sales Management	3	The sales management role is the main stakeholder of this research, its perception of effectiveness is key to develop a comprehensive framework.
Sales Representative	2	This role helps to understand the uses of the current systems and process, plus it will give feedback about the way sales representatives understand the effectiveness of the sales operations response.
Sales Operations Analyst	2	The sales operations analyst is the one who owns the current process and the one who will be impacted by the implementation of RPA in its daily job.

*Table 1. Criteria to select interviewees*

The researcher took advantage of its role within the organization and selected all the participants based on their experience and role within the sales organization of the cybersecurity company Palo Alto Networks. The researcher relied on his relationship with groups of experts in the sales management field to participate in this research. A review of a short biography about each candidate facilitated the selection of the participants for this research. Table 2 illustrates the position and years of experience of the participants in this research.

Code Name	Years of Experience	Role	Relevance
Alpha	6	Deal Desk Manager	Deal Desk role is key to decide over the commercial proposal for customers.
Epsilon	3	Sales Operations Manager	The sales Operations manager has a complete overview of the sales cycle.
Gamma	4	Sales Operations Director	The Sales Operations Director know about the complete process of the sales back-office team, including strategy and forecast.
Kappa	3	Strategic Relations Renewals	Sales representative are experts in the definition of the effectiveness of the sale cycle.
Delta	3	Sales Operations Manager	The sales Operations manager has a complete overview of the sales cycle.
Iota	3	Territory Sales Manager	Sales representative are experts in the definition of the effectiveness of the sale cycle.
Theta	4	Account Manager SEUR	Sales representative are experts in the definition of the effectiveness of the sale cycle.

*Table 2. Participants Information*

The interview will be done for the 2 types of experts, firstly with the sales representatives who embody the front-office team of the sales organization and secondly the sales operations analysts and sales regional managers who represent the back-office of the sales organization. The reasons for this division are:

- Capture different points of view about the effectiveness of the current process from now on called “as-is”. Each team has different priorities on their daily business, this will be used to identify which tasks can be automated and if those tasks influence the effectiveness of the sales organization.
- Because the front-office team perception of an effective sales organization may vary from the perception of the back-office team, the front-office team is the one who creates requirements, those are then introduced into the back-office process flow. Therefore, the front-office team could provide meaningful insight into their perception of effectiveness and the possibility to use RPA on the “To-Be” process.
- It is important to gather information about the input and the output of the requirements to analyze if the use of RPA in the back-office process of the sales organization would change the effectiveness of the whole sales organization, , this is where the sales representatives will provide more insight. And on the other hand, the process where these requirements are solved, this is where the back-office team adds their experiences.

### 3.3. Data Collection and Procedures

There are three data collection methods in this qualitative research; documentation exploration and analysis, the current process analysis (from now on called “as-is”) and the interviews.

The main documents used in this study are research papers about RPA, definitions of the sales management process and business process automation best practices, all of those were explored with different tools described in Chapter 1.

The definition of the current process was performed by the researcher in the Sales Operations and Business Intelligence team of Palo Alto Networks, this cybersecurity company has a strong presence in the EMEA region, the headquarters are in Amsterdam. Therefore, the researcher experienced the process as-is on a daily bases, having access to documentation about definitions such as roles, tasks and requirements.

Interviews represent a narrative interpretation of the as-is and to-be processes, to round up the data collection, the researcher looked over different roles in the back and front office of the sales organization to create profiles of possible interviewees, all the data gathered will be transcribed and analyzed with methods described below.

### 3.4. Interview Protocol

To conduct the interviews the researcher contacted each participant through the corporate email service and obtained his/her approval to participate in the research by the same channel to secure the ethicality of the method (Thomas, 2011). The email was sent individually, including an informed description of the research to illustrate the purpose of the interview. Moreover, the sales back-office process diagram was attached to the email, this as-is process description was created in the time the researcher spent analyzing the daily tasks of the sales operations team (annex II. Process As-Is Description). The participant had the right to withdraw from the interview at any time, it could also end its participation in this research after the interview was concluded. The collected data was used only for the purpose of this research and was stored securely in the company's database and was not shared with nor used by any other entity (Sun, 2009).

The first contact with the participants was either by phone or through a face to face meeting, this was intended to explain the outlay of the research and put the participant at ease before the formal interview (Thomas, 2011), each participant was then contacted through email to set an appropriate date and time for the interview, it is worth to remark the participants had the right to select the date and time to conduct it, this text can be found in Annex I. At the beginning of each interview, the researcher gave a small summary of the research propose, the as-is process layout was sent previously by email. Therefore, the participant was aware of the objectives. Each interview was planned to take 50 minutes and it was recorded with two methods: if the interviewee was in the Amsterdam offices, a recorder would be placed over the meeting table, on the other hand, if the interviewee was in another location, the interview would be performed through a video call software called Zoom which has the recording option in its settings. The language of the interview was English due to the different languages the selected interviewees speak and because Palo Alto Networks has all their documentation in that language.

### 3.5. Data Analysis

One of the most important features of qualitative data analysis is the focus is on a written form of something that was originally in spoken words, not on numbers, as in quantitative research (Thomas, 2011). Therefore, the data analysis in qualitative research is rich in text, this data tends to be inductive (Sun, 2009). In qualitative research, the data analysis stage becomes an ongoing iterative process where data is continuously collected and analyzed almost simultaneously. Indeed, researchers generally analyze patterns in observations through the entire data collection phase (Creswell, 2014). The following steps were used to analyze the collected data through the data collection stage:

Step 1: Organizing the data. Here a full data set was collected in one location and is systematically arranged to answer the research question at hand, was organized into six main categories:

- a. data related to RPA technology, such as its basic concepts, features and history.
- b. data related to the applications of RPA technology in different back-office departments.
- c. data related to the design of Business Processes (BPM).
- d. the sales management processes which are the office where the implementation of automation tools is intended.

- e. The description of the process as-is was created with data collected in a period of 6 months.
- f. The documentation created by the sales operations team in the past 2 years helped to create data related to the process.

Step 2: High-level review. The purpose was to determine which documents were useful for the research design especially the research questions (O'Connor & Gibson, 2003). This step included a comprehensive review of all the material collected during the data collection stage. Henceforth, an evaluation of possible candidates according to their experience and involvement with the process.

Step 3: Coding. Words/phrases used frequently, as well as ideas coming from the interviewee expressions were identified. Consequently, these results and documentation analysis were grouped together into categories and assigned a label. For example, part of the participants had concerns on the design from different perspectives. The concerns were categorized according to the main topics of the interview analysis made over Atlas.ti where all the interview was coded and grouped by topics.

Step 4: Description. The aim of this step was to generate detailed rendering information and to develop general themes or categories, each of the response categories has one or more associated themes that give a deeper meaning to the data (O'Connor & Gibson, 2003). Different categories can be collapsed under one main overarching theme. Thereupon, those categories formed the major improvements of the design iterations and formed the major finding of the research in the final iteration.

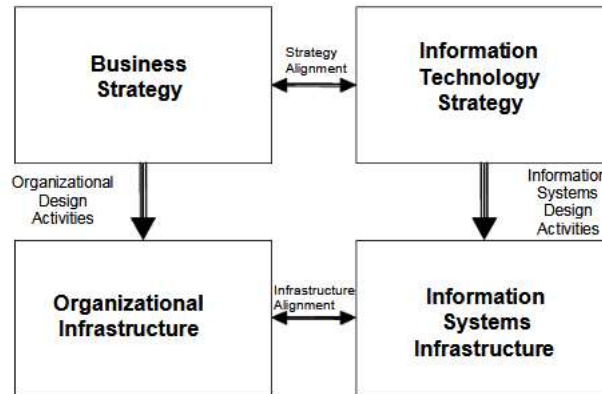
Step 5: Validating data. This step validated the data through triangulation, the findings from the different categories were confirmed between three independent sources of information: the interview with the sales operations team, the interview with the sales team and the literature researched give different perspectives on the topic (O'Connor & Gibson, 2003)..

Step 6: Interpretation. This step involved making interpretations of the conclusions generated from step 4, mainly thinking about the implications between the findings and the research question. The inclusion of suggestions, the arise of new questions and the description of future research opportunities that were not considered in this research were designated in this step. Moreover, the interpretation includes the factors which were the most crucial to the validation of the design (Creswell, 2014).

## Chapter 4 – Solution Design

### 4.1. Design for information systems

Information systems and organizations are composed of people, operational structures, technological tools, and work systems (Alter, 2003). As Henderson and Venkatraman explain in their research about strategic alignment there are 4 types of alignments (Figure 1) between the organizational structure and the information systems. All these require extensive design activity on both sides of the figure to create an effective design. Every organization it's defined by its goal, design an organization which focuses on use resources to accomplish this goal is the main work of Information System practitioners and managers (Boland, 2002),



*Figure 7. Organizational Design and Information Systems Design Activities  
Adapted from: (Henderson & Venkatraman, 1993)*

Differentiating routine design or system building from design research needs to be discussed for this research, the nature of the problem and the solution will provide the benchmark to differentiate both. Whereas, the routine design is the application of existing knowledge to organizational problems, design-science research addresses important unsolved problems in unique or innovative ways or solve problems in more effective or efficient ways (Hevner, March, Park, & Ram, 2004).

The target of this research is to contribute to the actual knowledge of the sales back-office process by exploring the implementation of RPA technology, creating an artifact based on foundations and methodologies described in the figure below. Specifically, it presents the conceptual framework for understanding, executing, and evaluating this research by combining behavioral-science and design-science paradigms (Hevner, March, Park, & Ram, 2004).



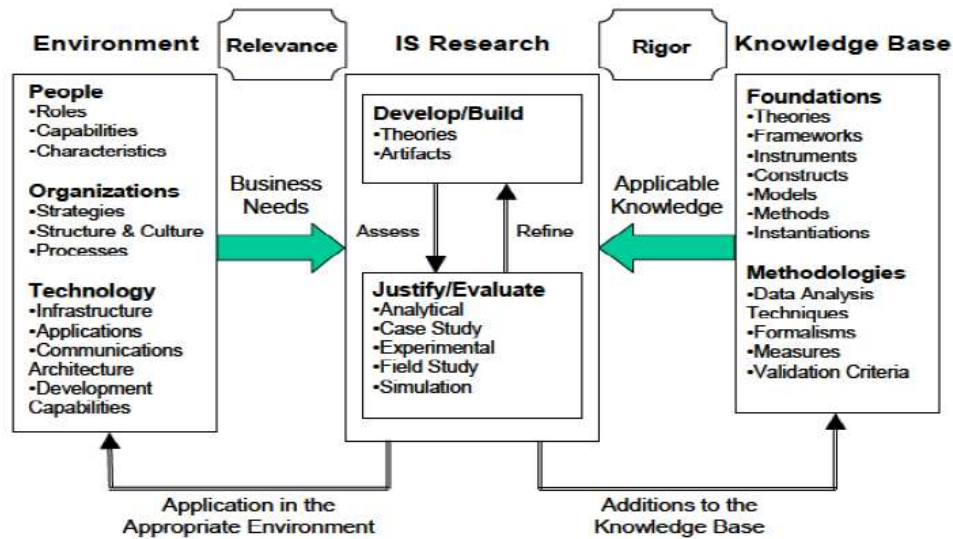


Figure 8. Information Systems Research Framework

Source: (Hevner, March, Park, & Ram, 2004)

- Environment makes reference to space where the problem is defined, also, where the goals and task are defined and perceived by people in the organization.
- IS research can either have a design science approach or a behavioral science one. For this study the IS research will focus on the building of an artifact which will be evaluated with the case study approach. Therefore, addressing the problem with the design science approach whose goal is utility.
- The knowledge base is composed of foundations and methodologies which provide the raw materials from and through the research is accomplished. Consequently, and according to Hevner et. al, the use of empirical techniques to collect data can also be employed for design science.

Design science is inherently a problem-solving process, for this approach Hevner et. al, have derived seven guidelines from the fundamental principle that knowledge and understanding of a design problem and its solution are acquired in the building and application of an artifact. Table 3 below lists the seven guidelines and their descriptions:

Guideline	Description
Guideline 1: Design as an Artifact	Design-science research must produce a viable artifact in the form of a construct, a model, a method, or an instantiation
Guideline 2: Problem Relevance	The objective of design-science research is to develop technology-based solutions to important and relevant business problems
Guideline 3: Design Evaluation	The utility, quality, and efficacy of a design artifact must be rigorously demonstrated via well-executed evaluation methods
Guideline 4: Research Contributions	Effective design-science research must provide clear and verifiable contributions in the areas of the design artifact, design foundations, and/or design methodologies
Guideline 5: Research Rigor	Design-science research relies upon the application of rigorous methods in both the construction and evaluation of the design artifact.
Guideline 6: Design as a Search Process	The search for an effective artifact requires utilizing available means to reach desired ends while satisfying laws in the problem environment
Guideline 7: Communication of Research	Design-science research must be presented effectively both to technology-oriented as well as management-oriented audiences

Table 3. Design-Science Research Guidelines

The table above discusses IT artifacts which are defined as innovations that shape the different concepts, practices, technical capabilities, and products of an environment. However, this approach has to consider problems like unstable requirements, complex interactions, critical dependence of upon human cognitive abilities and dependence on human social abilities. All those will be disused further on each iteration of the design.

## 4.2. Design Evaluation

The evaluation phase provides essential feedback to the construction phase, in this study it will be described not in terms of efficiency but in terms of effectiveness. The RPA solution will be completed when it satisfies the requirements and constraints of the problem defined in Chapter 1.

The design evaluation method for this research will be the observational method using case study, following, the RPA solution will be studied in depth in a defined business environment, in this case it will be the sales back-office of a cybersecurity company. With this intention, the iterative design will be constructed with the feedback of professionals from the front and back office of the sales organization, they will give important feedback to evaluate the artifact in terms of functionality and usability fitting the organization's environment (Hevner, March, Park, & Ram, 2004).

The test cycle of these iterations will include the generation of a first design which will later be tested against requirements and constraints. This will repeat until the problem reaches a solution with the available means satisfying the laws existing in the environment (Simon, 1996). Equally important we have to mention that means are the set of actions and resources available to construct a solution. Ends represent goals and constraints on the solution. Laws are uncontrollable forces in the environment. (Hevner, March, Park, & Ram, 2004).

Accordingly, the steps for conducting this research will be the following:

1. Map the current process to handle the front-office requirements from the sales operations point of view. This will identify the main team members and tasks.
2. Create the as-is process for the whole sales back-office team and identify the task division.
3. Develop an automated solution that can handle the transactions of the front office requirements, identify which tasks can be automated in relation to the effectiveness of the overall process.
4. Conduct interviews with professionals from the business environment (including managers and operators) to validate and review the as-is process. Then, cover questions to validate the to-be process which includes the artifact.
5. Analyze the results of the interview to refine the design.
6. Iterate steps 3, 4 and 5, until final validation by professional reviewers.
7. Analyze the final interview results to conclude the research.

## 4.3. Design Description

Background.

Palo Alto Networks (PAN) is a cybersecurity company based in California with presence in 150 countries, its employees over 6,000 workers with 4 Global Key Offices (Americas, EMEA, APAC and Japan). The company focuses on a B2B market and has more than 60,000 customers worldwide. Its revenue FY18 is \$2.3b with 29% Year-Over-Year Increase<sup>5</sup>. Their products range from physical equipment, professional services, virtual solutions and cloud services to ensure cybersecurity in their client's platforms, those are described in the figure below.

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<sup>5</sup> <https://www.paloaltonetworks.com/about-us>

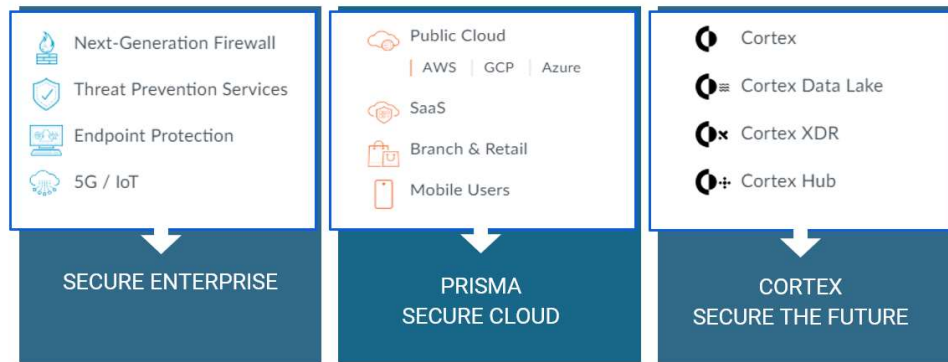


Figure 9. Palo Alto Networks Portfolio  
Source: <https://www.paloaltonetworks.com/>

**Mission:** A World Where Each Day Is Safer and More Secure Than the Last

**Vision:** Cybersecurity partner of choice, protecting our digital way of life.

**Objectives:** Among revenue increase, growth and product positioning, from the operations point of view, PAN also has operation and customer satisfaction objectives such as:

- Striving for 100% Customer Satisfaction.
- Laser Focus on The Customer Experience
- Automation and Simplification
- Telemetry and product integrations
- Proactive service scaled including BPAs

#### 4.4. PAN Sales Organization

The go-to-market strategy is mainly through their partners managed by their channels team with campaigns such as NextWave Partner. However, they also approach customer directly with their own representative. The approach would variate according each customer profile, their main goal is to ensure the delivery of comprehensive solutions<sup>6</sup>, these both approaches are described in the figure below.

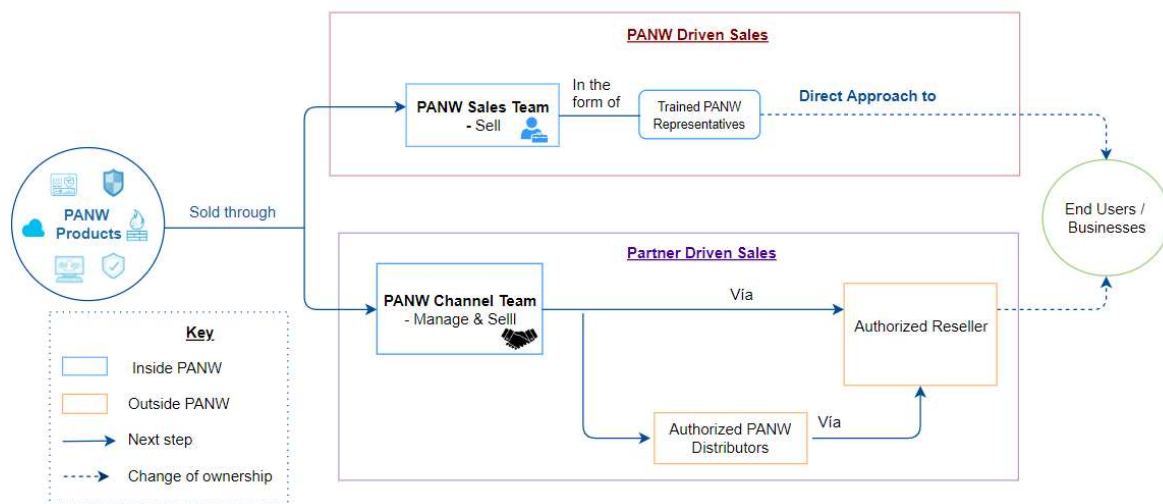


Figure 10. Palo Alto Networks Approach to Market

<sup>6</sup> <https://www.paloaltonetworks.com/partners/alliance>

#### **a. Sales Front-Office**

PAN Sales Organization has 4 main divisions according to the way they approach the market:

1. Channels Team. Interaction and management of partners around the globe.
2. Renewals Team. Interaction and management of current clients.
3. Inside Sales Team. Development and Management of small purchases related to small and medium clients.
4. Field Sales Team Development and Management of large purchases related to large clients.

They all report to the sales vice president for each global region, PAN calls these regions theatres, this study is focused where the researcher was based, therefore all the organization will refer to the EMEA theater.

#### **b. Sales Back-Office**

PAN Sales Organization has a back-office who is in charge of the administrative, strategic, control and support of the front office. The teams are divided according to their function and they have members in the EMEA and Americas theatres.

- Deal Management. Support during pricing and RFP/RFI.
- Sales Analytics. Support over different reports over the systems such as SFDC and Tableau.
- Sales Operations Systems. Technical support for all systems used by the sales organization, this includes data governance.
- Sales Operations. Support of pre-sales and post-sales requirements from the front office or final customer.
- Global Channel & Public Cloud Operations. Support for partners control and channel's strategy.
- Sales Compensation. Support to calculate differences between the sales representative's participation over deals and accounts.
- Data Governance. Support on all the data order and data validity across all sales systems such as Clari, Tableau, SFDC and SAP Hana.
- Order Desk: Support over Purchases orders and issues after the contract or services was confirmed.

#### **4.5. Process As-Is.**

The researcher spent nine months in the sales operations department at Palo Alto Networks in the EMEA theater. One of its main tasks was to analyze the type of requirements received from the sales representatives and the resolving process of the "EMEA Sales Operations Inbox"<sup>7</sup> all sales operations managers from the regions have access to it. It is the inbox where SFO send requests regarding a variety of topics described later.

The current interaction is done only via email, the sales representatives create requirements about Pre-Sales, Post Sales or System Requirements. They can refer to specific steps in the sales cycle including reports and dashboards. Figure 11 describes the request process.

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<sup>7</sup> This is the email alias where all EMEA request were sent.

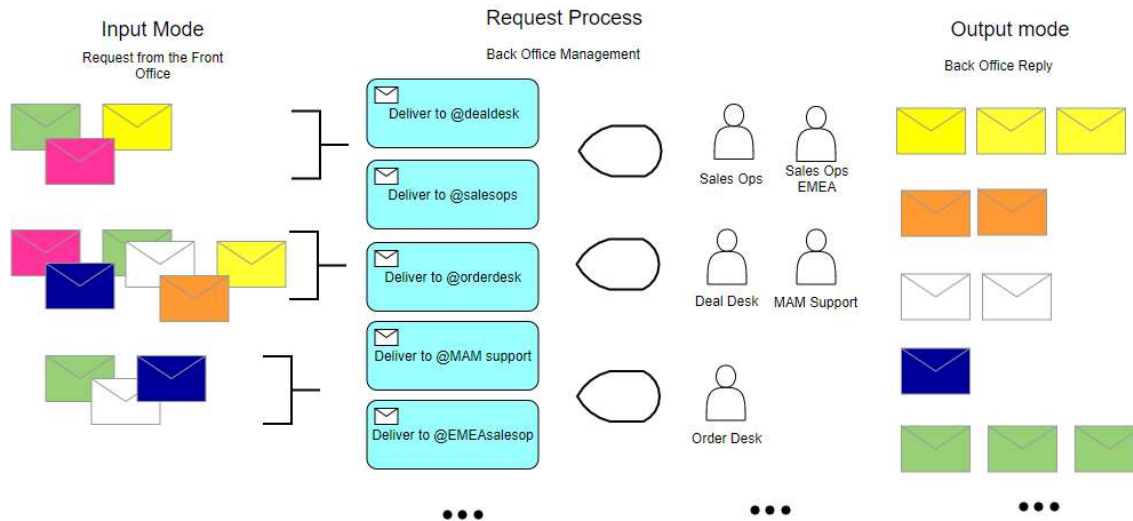


Figure 11. Request Process Overview - Process As-Is

The requirements sent by the sales representatives do not follow a standard, each email request is different and because it is hard to identify who is the person behind the email address the sales representatives are used to copy more than one team in the request. The managers of the inbox are constantly ordering the emails they receive, in most of the cases, the request doesn't concern the team and needs to be re-sent according the responsibility definition showed in Annex II, title Responsibilities & Contacts.

Based on the information gathered above the process was divided into two, the sales back-office team, from now on called SBO, who is the responsible for solving the requirements and the sales front-office who is the source of all requirements and includes the partners, from now on called SFO. In Annex Process As-Is the SFO is the process pool colored light blue and the SBO is colored blue, they are both parts of the sales organization. Described in the SFO pool are the possible options an SFO member has before sending the requested email. For example, if the requirement is about compensation, the requestor would need to send an email to the sales analytics and the sales compensation team.

The interaction between the SFO and SBO can become complex quickly. Since there is no way to control the email traffic and more than one team have access to the same inbox, the requests can be "buried" in a pile of past requests, this is true for the EMEA theater, however, it is even harder to find an email when global team are involved. There are some types of requirements that need, for some reason, the involvement of the SBO team based in the US., this becomes a challenge for the SFO since they need to follow up each email they send and make sure the SBO received the request correctly. This following is done via personal email, personal chat system, video call or phone call. The SFO process to create a request is described in Figure 12.

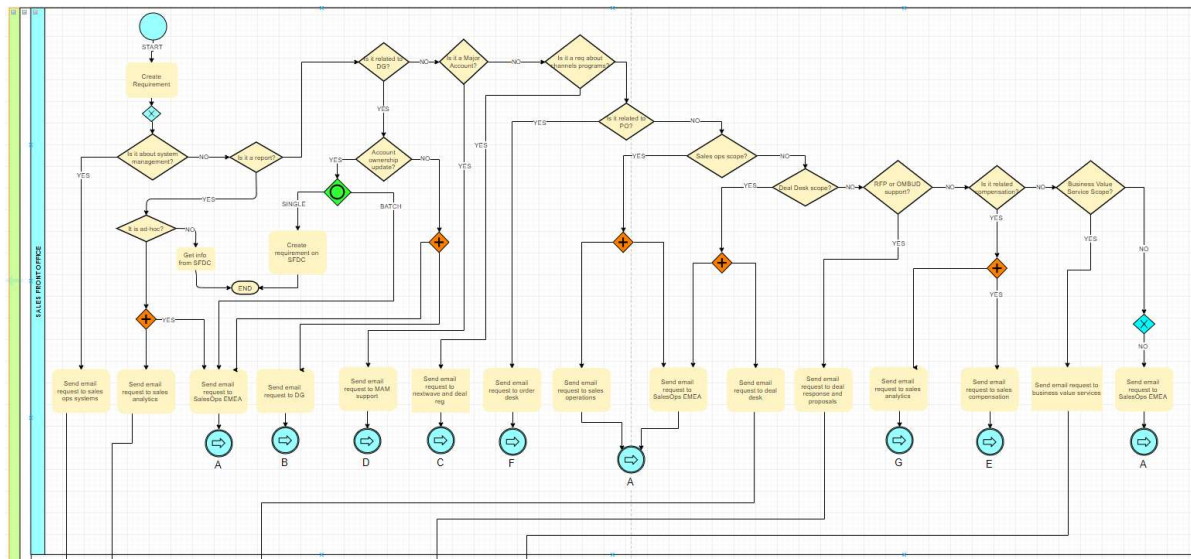


Figure 12. SFO Create Requirement Process As-Is

The complete process As-Is is in Annex II and it was created by the researcher since there was not a proper description to work with at that moment. There were multiple sources of information to complete the mapping including all documentation related to the sales back-office process and its teams, this information included a description of tasks described the Loop<sup>8</sup>, PowerPoint presentations about reports and team presentations, manuals and interviews about daily tasks the team solves and delivers in daily matters.

#### 4.6. Design principles

The preliminary design will work as a starting point for next iterations, on each iteration the artifact will be described and compared with the previous version of it with concepts taken from the literature review and the theoretical background. Firstly, the researcher referred to the sales system definition of Zoltners et al. where the sales force effectiveness drivers are Definers, Shapers, Exciters, Enlighteners and Controllers. It is worth to mention that on this definition there are forces out of the sales system which influence the customer result, these factors are R&D, Operations, Finance, Marketing, Product Offering, Pricing, Service and Channel Strategy. (Zoltners, Sinha, & Lomier, 2008).

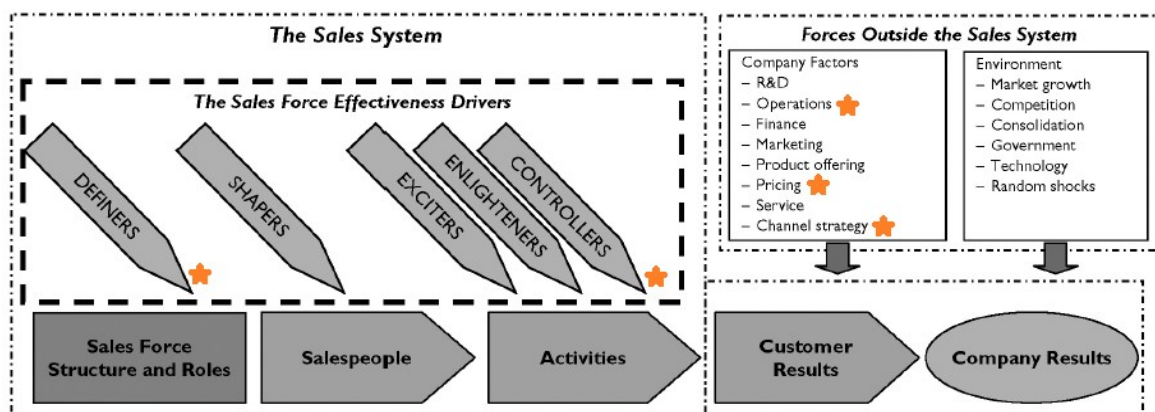


Figure 13. SBO influence in the Sales System

<sup>8</sup> PAN intranet

The Preliminary design considers implementing automated processes over forces in and out the sales system. About the sales system we have the Definers and Controllers drivers, which influence the sales force structure and activities. On the other hand, for the Outside Forces, the approach is to implement process automation on factors like Operations, Pricing and Channel Strategy.

Since all these forces and drivers have different approaches, this study aims to explore the ones that work closely with the sales back-office process described in the process As-Is. Therefore, the Drivers Shapers, Exciters and Enlighteners will not be considered since their approach is to explore the sales front-office. Moreover, the sales back-office has no business connections with the R&D, Finance, Marketing, Product Offering and Services external factors.

Secondly, the process as-is shows characteristics of a shared service center, at the beginning of the study when the complete process was not mapped there was no clear indication of it. However, now it is clear that it is possible to compare the as-is process with the shared services concept, these teams are supposed to deliver low-cost services. Still, this cost needs to be balanced with the effectiveness and efficiency of its performance to compliance service excellence, business enablement, scalability, flexibility, security, and compliance. (Lacity & Willcocks, 2016).

Achieving a high-performance shared services organization is a daunting process, particularly because shared services are often assembled from decentralized units with variable process maturity and different cultures and cost structures. According to this high-performance definition, there are five main transformation levels, these levels will be used as a benchmark to create the Service Automation Office which will include characters such as centralize request management, standardize processes across business units, optimize processes to reduce errors and waste, simplify the service portfolio and use technology to automate services (Jeruchimowitz & Axson, 2015).

Besides, key control points will be used according to definitions brought by previous researchers to ensure the correct internal adoption of the technology. The following points will be addressed:

- Prepare the IT department and Develop IT capabilities
- Select Processes Carefully and Measure Improvements
- Re-Think Talent
- The Center of Excellence

#### 4.7. Preliminary Design

In the first version of the Service Automation Office, the system needs to re-route incoming requests from different roles of the front office including PAN channel representatives. Thereupon, the first change from the As-Is process is the use of a simple request interface which will be integrated into the company's intranet. The IT structure for this intranet already exist, therefore, the interface will be ready to interact in a relatively short period.

The first change will be noticed in the sales front-office interaction with the back-office explain in Figure 11. The requestor will now have all the information in one place and can create different types of requests based on its needs. The system will route all request based on rules depending on each team responsibilities. For example, if the requestor needs support to change an equipment license, she only needs to open a case in the "Sales Desk" interface and the system will send it to the order desk team. The interaction would look like Figure 14.



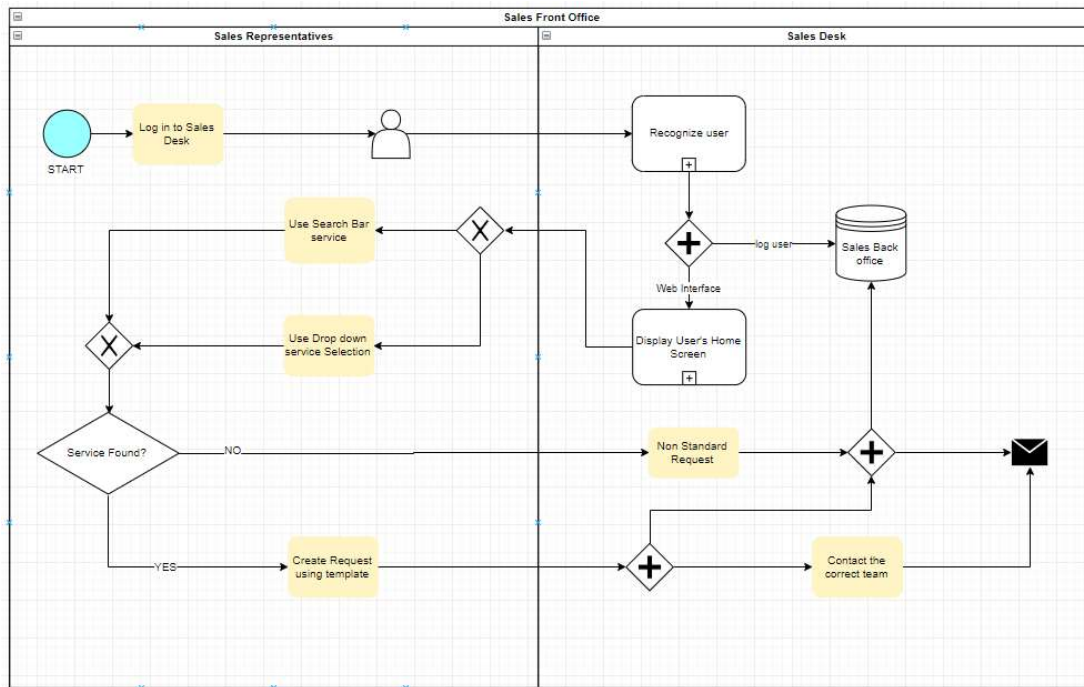


Figure 14. SFO NEW Create Requirement Process

The main improvement from the as-is process is the simplification of the way sales representatives contact the back-office. Instead of having a piece of paper to select the correct email, or having to check over past emails, now there is a comprehensive way to find the correct process over the interface. The second improvement is the user recognition tool, this will help the system to check over the credentials and show different options.

Moreover, this will give the chance to include PAN channels partners to apply over discounts and other post-sales requirements. The interface can connect with the sales back-office server to identify credentials and display the correct menu. There is an inclusion of a new role called REQ BOT (request robot), this is the first bot of the solutions and its mission is to learn the priority of each role, the recurrency of tasks and the complexity of each.

This preliminary design will not only reroute the income request, but it will also keep a log of each one, Figure 15 describes these interactions. All the request will go through the sorting system which should not have a problem to manage and log daily requests because, according to the researcher first interaction with the sales operations inbox, the EMEA theater had about 6,750 requests per year<sup>9</sup>. Therefore, even if we take account of the four theaters of PAN, we would have a total of 27,000 requests per year, at the same time these translate into 2,250 requests per month, the amount that can be easily managed by the current architecture.

<sup>9</sup> Report presented to EMEA PAN Sales Operations Managers December 2018.



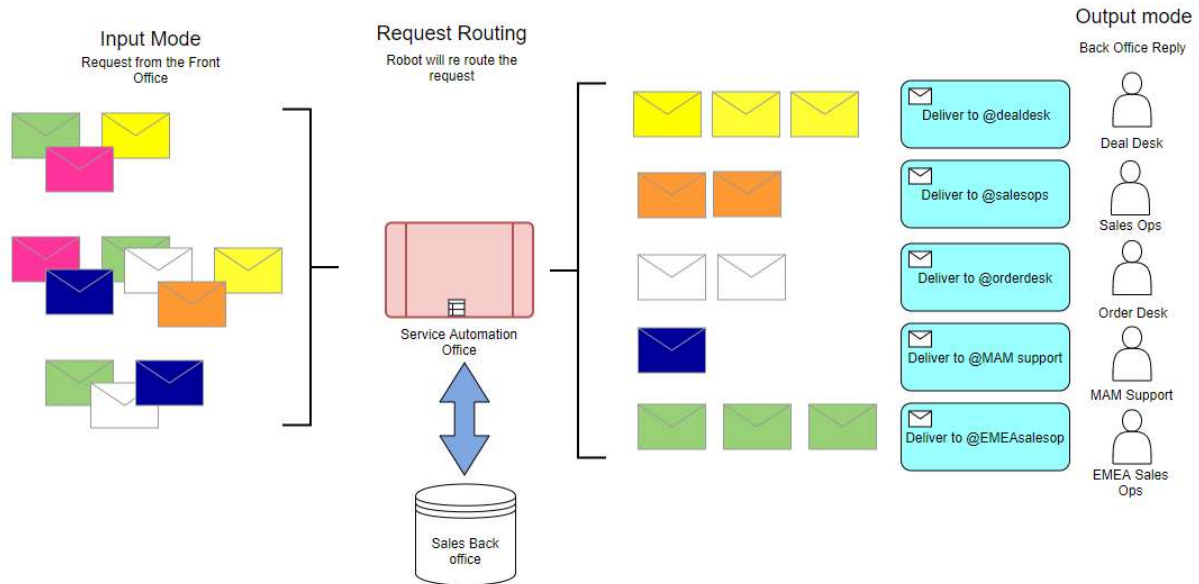


Figure 15. Interaction SFO-Request Bot-SBO (preliminary)

The Service Automation Office interaction seems to represent a solution to centralize the resources that PAN sales back-office uses to attend the requirements, this means, all interactions will have an ID and will be trackable through time. This tool already gives important inside about the behavior of different sales roles.

Salesforce Effectiveness Driver	The cluster of Sales Management Decision by Impact	Preliminary vs As-Is
Definers	Salesforce design	There is a change in the way the sales force contacts the back-office.
	Structure and roles	There is no change in the roles nor structure.
	Salesforce size	There is no change in the sales force size.
	Territory alignment	There is no change in the territory alignment.
Controllers	Culture	There is a change in the attitudes of the sales representatives, they will have to get used to the new request system which will not include the use of email, this may represent a challenge for the back-office team.
	Sales managers	No change for sales managers.
	Compensation and incentives	No change for the compensation workflow.
	Performance management and measurement	The performance would increase since there will always be someone responsible for the request and all the activities will be logged for measurement.
	Goal setting and forecasting	No change.
Forces outside the Sales System	Coordination and communication	The coordination is a key part when the system is rolled out, the challenge is for people to understand the new process. There is an increase in the coordination of tasks due to the new interaction ID.
	Operation	There is an inclusion of the IT team to control the Service Automation Office. The main team division is still on and the email addresses are all working.
	Pricing	No influence on the pricing model or process.
	Channel Strategy	The channel team will have more interaction with the partners over the new interface.

Table 4. Effectiveness drivers- Preliminary vs As-Is

## 4.8. Iterations

### First Iteration.

For this step, the research will take the interviewees' highlights about the process as-is to find out more about what tasks are effective and efficient, the roles that the back-office has and the nature of the requirements. The concepts were analyzed using the Atlas.ti Network analyzer, the G indicator of this tool helps to see how many times a concept or code repeats in the interview, a denominator below three has not enough importance at this point of the design and can be discussed later if not solve by an iteration. The complete mind map of this analysis can be found in Annex III in the subtitles mind maps "process as is" and "repetitive task definition", the results are:

- a. The Sales Back Office (SBO) process and the Pre-Sales Process follow the rules and rarely need interpretation, they are both part of the sales cycle which also is based on defined rules these concepts were expressed 6 times across different interviews (G=6). However, there is also data that shows how the SBO process as uncertain (G=3) this is associated with the way the Sales Front Office (SFO) contact the SBO on the requirement (G=3) which at the same causes a perception of variable requirements which do not always follow the rules. This becomes an important challenge since automation is better performed with tasks that are repetitive and follow the rules.
- b. There are also qualities the Process As-Is currently has and next iterations should keep such as the fastness of the Deal Desk (G=7) even if the service is not 24/7 (G=2) people were not too concern about any time service. Secondly, the presence of Administrative tasks (G=3), including Post-Sales dull processes (G=2), and the perception of the SBO as an advisor (G=10).
- c. Because this study explores the effectiveness of using automation tools, the effectiveness and efficiency concepts will be further explored in the next mind map, however now, the repetitive tasks need to be explored. The whole sales cycle has repetitive tasks (G=10) because a certain number of steps and activities needs to be pre-defined by the strategy team, moreover, this has properties such as the Post-Sales process which has repetitive tasks defined by rules (G=9), this process is part of the SBO which also has repetitive tasks (G=9), they both follow the rules defined by the strategy team and the operations managers whose main objective is the delivery of the product.

To address the point below this iteration proposes to redesign the SBO organization, this new organization is detailly explained on ANNEX IV ITERATION I. Additionally, tasks will be reassigned according to the following team structure:

- I. Strategy & Planning: this team is responsible of the Go To Market, Rules of Engagement and Quota definitions which are strategic tasks since they define the way the products will be commercialized and how the interaction between territories and partners will be throughout a financial year or quarter. The teams are related to sales analytics and channels since they both have information to create this strategy and are the main source of information for adjustments. One of the main factors to create this division is to align tasks and roles between the business strategy and the sales process.
- II. Business Control, where all the dashboards and reports are created to be then analyzed and finally published. Quotas, Forecasts, the Partner Programs and all types of analytics are run to ensure the correct deployment of resources and

compliance with the strategy. The creation of this division flows the BPM principle of goal definition and measurement.

- III. IT Systems Management, all system used by the sales team are managed here including CRM, databases and forecast tools. This team is deeply related to the central IT organization of PAN but it has specialized attention to the needs of the sales organization and follows its strategy. Here is also where the first automation artifact has better chances to be deployed, due to its proximity to the IT team and the knowledge they gather from Business Control, the Service Automation Office will manage the Request bot and the new request interface which will be explained further in the paragraphs below.
- IV. Post-Sales, this team is mainly focused on the solution of requests originated after the product, service or software were confirmed by the customer with a contract or a purchase order. Within the Post-Sales team, this iteration still maintains the original teams with the original addresses for contact and has not automated any process yet. Device transfers, cancel Pos, upgrades, and migrations are important to ensure the reliability of the team.
- V. Pre-Sales, with the same principles as the team above, the presales team main objective is to solve all types of request created before the customer confirms the use of PAN solutions. This team includes complex roles such as partners programs, RFP and pricing support, and ELAs/ESAs creation support including rules of engagement. Over this team, there were not automation proposed since more information needs to be gathered.

Technology Adoption	
Automation Principle	Iteration I vs Preliminary
Prepare the IT department & Develop IT capabilities	On this iteration, the Request bot and the service automation office are now part of the IT System Management team which maintains its links with the central IT department, but it follows the business requirements of the sales organization.
Select Processes Carefully and Measure Improvements	To address the point a. of the interview's analysis, in this iteration the process was correctly defined according to BPM principles and closed the uncertainty of requirements from the SFO. Moreover, SBO tasks that are most likely to follow the rules and do not need interpretation are located in the Pre and Post-sales teams.
Re-Think Talent	People in the shared service roles will now have specific parts of the business to attend in their daily work, no more changes were done under this topic since only one automated solution was implemented.
RPA center of Excellence	The service automation office is now part of the organization and is in constant contact with Data Governance and the CRM systems. So far, the main task keeps on re-routing the request to the correct team, but it is also checking over the fastness of the deal desk as described on point b of the interview analysis.
Business Adoption	

<b>Salesforce Effectiveness Driver</b>	<b>The cluster of Sales Management Decision by Impact</b>	<b>Iteration I vs Preliminary</b>
Definers	Salesforce design	SFO contact SBO with the interface which is connected to the requesting bot which is monitor and order the tasks.
	Structure and roles	There is no change on roles, all teams remain the same they are only allocated on different organizations.
	Salesforce size	There is no change in the sales force size.
	Territory alignment	There is no change in the territory alignment.
Controllers	Culture	There is a change in the attitudes of the sales representatives, they will have to get used to the new request system which will not include the use of email, this may represent a challenge for the back-office team.
	Sales managers	No change for sales managers.
	Compensation and incentives	No change for the compensation workflow, the compensation task now can be followed by the requestor with the task menu.
	Performance management and measurement	The measurement now is saved in the log server where each user has an ID and you can check over the velocity of deal desk reassuring the point b of the interview analysis.
	Goal setting and forecasting	The strategy and planning organization will now be responsible for goal setting, the forecasting will be the responsibility of business control.
	Coordination and communication	No change over communication.
Forces outside the Sales System	Operation	The SBO has a complete change in the organization please refer to ANNEX ITERATION I.
	Pricing	The pricing process is now part of the pre-sales organization and has constant interaction with other presales teams.
	Channel Strategy	Partners now have a complete view of request they send and can access to information about new programs on the interface.

*Table 5. Effectiveness drivers- Iteration I*

ITERATION I			
Organization	Manual Process	Automated Process	Automation Rate
Sales Front Office	3	1	25.00%
Strategy & Planning	4	0	0.00%
Business Control	10	0	0.00%
Sys & Info Management	20	1	4.76%
Post Sales	18	0	0.00%
Pre-Sales	30	0	0.00%
Total	82	1	1.20%

*Table 6. Automation Percentage - Iteration I*

## Second Iteration.

Before the creation of the next iteration, the concepts from the interview were analyzed using the Atlas.ti Network analysis where it is possible to see how many times certain concept has been repeated by the G indicator, this time, a denominator below 3 has not enough importance at this point of the design and can be discussed later if not solve by an iteration, the complete mind map can be found in two annexes: Annex III the mind maps SBO Automation definition and mind map automation limits, the results are:

- From mind maps SBO Automation definition we can conclude that: SBO automation is possible (G=7), this statement causes than other important statements such as SBO automation increases human accuracy (G=8) and SBO automation would increase the effectiveness of the whole organization (G=7). However, the type of tasks which could be automated still need to be defined according to the literature review and the theory behind it.
- To make the automation possible, systems need constant interaction with the Data Governance team (G=10) this will then be translated into more information to analyze about the SBO which at the same time increases the information the team needs to agree on a strategy.
- Part of the Compensation & Commission can be automated (G=3), but not the complete decision process, and Standard discounts are also good candidates for the 1st automation tests (G=4).
- There is one concept that only appears once but raises a fair concern, Automation cripples process. This is due to the current automation process used in Data Governance about the territory definition. One of the main repetitive tasks is to change the account level, owner or details for different regions in EMEA. This task is still manual and takes time for Sales Operations managers to solve, this is originated in an incomplete introduction of process automation. Moreover, these concepts links with codes on mind map automation limits, these explain the limits for an automated system.
- If the automation system (AI) did not work properly it would create great frustration (G=5), SWOT and PESTLE analysis which usually are defined in the pre-sales or the strategy team cannot be automated (G=10) mainly because they need deep human interaction and decision (G=14). Other key tasks that cannot be automated are forecasting (G=3), Pipeline and Stakeholders Management (G=1 and G=3), which are now part of business control team and needs human interaction to function (G=6).

To address the point below this iteration proposes tasks, roles, and new automation processes in the SBO organization, this new process is detailly explained on ANNEX IV Iteration II. Additionally, the organization design is proposed according to the following team structure:

- I. Strategy & Planning: the “Enhancement, training and support request” task was moved here because it is an essential part of the strategy to define the approach to take when people need support or want to enhance their processes. To address point d. of the interview analysis, it is important to create training that addresses concerns such as automation performance and expectations.
- II. Business Control, in this iteration there is an introduction of approval tasks. Standard Discount, Commission Approvals, Split Approvals and all the approvals coming from automated system will be the responsibility of the business control team. The interface will deploy all the information necessary for the operator’s informed decision over those topics. Therefore, the interface is now part of the approval process, in this case after the approval (or rejection) is done the interface would send an automatic email to the requester. This refers to the analysis made on point a. of the interview analysis of this iteration.
- III. System Information & Management, to address point b. of the interview analysis, the Request Bot is now part of a bigger automated entity called System Management Bot. The maintenance and control of this bot is the responsibility of the Service Automation Office which will have the participation of a member of the IT and another member of Data Governance. On the other hand, this team has a new task called “Translate business cases to process flow” point d. of the interview analysis, this structure follows the definition of the Center of Excellence in the Theoretical background of Chapter 2.
- IV. Post-Sales: for this iteration, the introduction of the Post Sales Bot seems to be an adequate introduction for tasks that repetitive or that follow certain rule pre-defined at the begging of a year or quarter (point a 1st iteration). Moreover, there were such processes that were described as dull (point b 1st iteration), another example is the point b. of the 2nd iteration where the automation of standard discounts was appointed for automation. Under this automated system there also information tasks such as trade certifications and policies. Additionally, it is important to remark that the automated system task is to gather information concerning the requester, the product and the type of request is done so the human operator can take a decision on the business control team.
- V. Pre-Sales: on the point E. of the interview analysis for the 2nd iteration there is a clear limit definition on the SWOT and PESTLE analysis made from the different team before the sales are consummated. Tasks like TCO, EFS, RFP support and deal structure depend on human interaction with other teams and the market. Moreover, this interaction is closely related to stakeholders such as CFO or Sales Vice President because of their nature of price sensitivity.

Technology Adoption	
Automation Principle	Iteration II vs Iteration I
Prepare the IT department & Develop IT capabilities	On this iteration the Request bot and the service automation office are now part of the Center of Excellence, this also involves the creation of an automated system called System Management Bot. These Center of Excellence has the goal of being the meeting point between IT, Data Governance and the business needs.

		Additionally, his iteration explains the deployment of two automated systems, the Pre-Sales Bot and the Post-Sales Bot.
Select Processes Carefully and Measure Improvements		Now with the introduction of new automation systems controlling the highest sources of request (in terms of QTY), it is possible to define better KPIs in order to measure the improvement of the organization.
Re-Think Talent		People in the shared service roles and the Center of Excellence will have the tasks to translate business needs into processes that can be read and interpreted by the automated systems. These new roles would have an understanding of both IT and Sales Operations needs, limits and capabilities.
RPA center of Excellence		The center of excellence now it is not only a bot to re-route the tasks created in the interface but, it controls other systems that solve ruled base processes and create a database of requirements which can be combined with CRM or forecast systems.
<b>Business Adoption</b>		
<b>Salesforce Effectiveness Driver</b>	<b>The cluster of Sales Management Decision by Impact</b>	<b>Iteration II vs Iteration I</b>
Definers	Salesforce design	The interaction system between the SFO and the SBO will be via email and interface when the tasks are manual, however, when the tasks are managed by a bot it will be via interface only.
	Structure and roles	The new structure now is more stable, and they would have cross-team meeting depending on the nature of their businesses, the email addresses are kept as before.
	Salesforce size	There is no change in the sales force size.
	Territory alignment	The territory alignment is now more dynamic thanks to the System Management bot, because is now directly connected with Data Governance it seems to be more effective in situation of constant account updates.
Controllers	Culture	The SFO will now have more interaction with the automation system since there will be tasks managed directly by the bots. However, due to the possible frustration, contact for special requests will be available in the interface.
	Sales managers	Sales Managers will now have an overview of the discount request SFO request, how many are accepted, how many rejected and the reasons.

	Compensation and incentives	The calculation and reason, like the ID of the sales representatives and their perceptions, will be recorded by the system in an orderly manner. Then the system will deliver the information to the sales operations manager through the platform to have a final decision. The same applies to incentives which will validate the work of the sales representatives with the account or territory managers.
	Performance management and measurement	The 4 automated system will now build a complete database system which can be used by the Strategy and Planning team to define the best way to measure the performance of each role.
	Goal setting and forecasting	No change in the Strategy and Planning team.
	Coordination and communication	The communication between the IT central, data governance and Center of Excellence is now integrated into the process flow, they share responsibilities in the definition of the automated flow and the way the business need is satisfied.
Forces outside the Sales System	Operation	The SBO has a complete change in the organization please refer to ANNEX ITERATION II. There is a new role called the Center of Excellence, it is important to remark that there is the need to create the role in each theater and add member according to the request of the team leader.
	Pricing	The pricing strategy is recognized as part of the SWOT or PESTLE analysis therefore, its automation is not complete but partial for standard discounts.
	Channel Strategy	Partners now have the chance to interact with the automation systems. However, this activity is logged in a different way because it needs to be interpreted by the Channel Manager of each region.

*Table 7. Effectiveness drivers- Iteration II*

ITERATION II			
Organization	Manual Process	Automated Process	Automation Rate
Sales Front Office	3	1	25.00%
Strategy & Planning	5	0	0.00%
Business Control	13	0	0.00%
Sys & Info Management	10	11	52.38%
Post Sales	4	17	80.95%
Pre-Sales	15	15	50.00%
Total	47	43	47.78%

*Table 8. Automation Percentage - Iteration II*

### Third Iteration.

Before the creation of the next iteration the concepts from the interview were analyzed using the Atlas.ti Network analysis where it is possible to see how many times certain concept has been repeated by the G indicator, this time, a denominator bellow 5 has not enough importance at this point of the design and can be discussed later if not solve by an iteration, the complete mind map can be found in the mind map proactive definition in the ANNEX IV Iteration III, the reason to check on proactivity is because machines would perform better on reactive rule-



based tasks. Therefore, it is important to explore alternatives where humans and machines interact with proactive tasks. Developing a communication strategy to address concerns about job losses and task reassignment is important. Business professionals need to feel comfortable about the arrival of software robots because they need to work with the technical specialists to program the robots and this is interpreted as a proactive activity (Hallikainen, Bekkhus, & Pan, 2018). the results are:

- a. The Pipeline Management is a proactive position (G=5) due to the nature of the role, the data is taken from the CRM and Clari systems, but it needs human interpretation based on the strategy and planning of each quarter. These roles and the forecast management (G=2) will be benefited from the automation of ruled based tasks because workers will spend less time on reactive tasks and more time on the management of opportunities.
- b. Strategy creation, interpretation, and management (G=10), Market knowledge (G=9), Planning (G=7) and Partner Education (G=1) are meaningful proactive tasks that help to build knowledge about internal capabilities and weaknesses. Those roles cannot be automated, but they need to be more organized and have multidisciplinary teams. Since they all have a deep relation with the tasks and roles where Porter 5 Forces and PESTLE techniques are used in a proactive way (G=11).
- c. There is an interesting concept relation based on the structure of the current proactive tasks, the concepts such as “proactive tasks not structured” (G=2) and the absence of a system to create proactive tasks (G=1) contradicts the idea of structured proactive tasks (G=1) and this needs to be attended by this iteration. Moreover, there is the notion that the data for these proactive roles exists (G=12) and this needs to be evaluated in the integration of the automated systems.
- d. SBO has both reactive and proactive tasks in the as-is process (G=6), it seems like team members are aware that they need both to accomplish their goal and achieve effectiveness.

To address the point below this iteration proposes tasks, roles, and new automation processes in the SBO organization, this new process is detailly explained on ANNEX ITERATION IV. One of the factors used for this iteration and especially for this organization is the coordination and controlling (explained in Chapter 2 page 14), to guarantee the flow of information and the control over uncertainty there are now 4 teams controlling the correct interaction between SFO and the strategy agreed. Additionally, the organization design is proposed according to the following team structure:

- I. Strategy, Planning & Management: this new organization inside the SBO is now in charge of all the tasks and requirements that require SWOT or PESTLE analysis, addressing point b. of the interview analysis, these are all proactive activities that the current workers do but do not have enough time to achieve them at its fullest. This new organization also addresses point c. of the analysis since it orders and structures roles and tasks that need cross-team information. For example, now the TCO and deal structure will proactively feed information to the Go to Market strategy, there is a good chance that you can develop a better strategy based on the deals you create across markets. Moreover, the channel’s program process will also create information and could beneficiate from the SFDC Einstein Analytics reports and dashboards which are created based on CRM, Clari, and Sales Desk data.
- II. Business Control: The Sales Operations & Business Intelligence team controls the correct measurement of the current situation versus the plan and versus the forecast. Their tasks are now either interpretation and creation of data or approval of

processes created by the machines in the automation system. To address the point of this iteration's interview analysis the pipeline and forecast management are tasks where team members will allocate their time after their rule base repetitive tasks are taken over the automation system.

- III. Center of Excellence, this is a new organization which is specialized in the management of automation systems. To address points of previous iterations and to institutionalize the practices of change and control following the concept described in Figure 1 BPM factors. System Information, Pre-Sales and Post Sales automatic processes are described in this organization. There is no hierarchical difference between the machines. Moreover, the Center of Excellence team is now in charge of the whole automation processes which includes the translation of business needs to processes and the creation of rules. The management life cycle will be a hybrid between the BPM and AB-BPM methodologies, that lifecycle will be explained better in the process To-Be description.

Technology Adoption		
Automation Principle		Iteration III vs Iteration II
Prepare the IT department & Develop IT capabilities		On this iteration the Center of Excellence is now an organization which covers the management of all automation systems and ensure the delivery of the service, the team follows BPM rules to ensure the best process implementation or modification.
Select Processes Carefully and Measure Improvements		The Measure of the Process improvement is now measured in the Center of Excellence Organization based on information collected from the automation systems.
Re-Think Talent		There is a change in the way the SBO works from now on, to achieve a successful implementation it is necessary to organize the proactive tasks like the point c. of the interview analysis expresses, this new talent has two main divisions. The first is the Strategy, Planning & Managing organization, they now have most of the pro-active tasks and all the reactive tasks they perform could be complemented with information extracted from the Center of Excellence. The second division is the Center of Excellence itself; this team now owns all the BPM process to create and modify processes.
RPA center of Excellence		The new center of excellence is now the responsibility of the RPA and Service Automation correct implementation on business processes received from SFO.
Business Adoption		
SalesForce Effectiveness Driver	The cluster of Sales Management Decision by Impact	Iteration III vs Iteration II
Definers	Salesforce design	People in the SBO will now have more time to develop and control proactive tasks.
	Structure and roles	The new structure now is simpler and ensures the correct use of the automation systems.
	Salesforce size	The salesforce has now interpreters that translate SFO requirements into processes.
	Territory alignment	There is no change in territory management in this iteration.
Controllers	Culture	The SFO will now have more information, this may cause confusion if it is now delivered correctly. There is a shift to a culture driven entirely by data.
	Sales managers	Sales Managers will now have different methods to measure the effectiveness and efficiency of the sales cycle.
	Compensation and incentives	There is no change in the process of compensation and incentives from the second iteration.
	Performance management and measurement	Adding value is one of the main characteristics of the sales process, with all the information that would be created it is possible to create

		objectives measurements of value addition to the customer experience.
	Goal setting and forecasting	Goals and forecast now have more time to be developed and have more information to relay on, this would impact in sales areas such as renewals and inside sales, which are an organization that depends deeply in the forecast.
	Coordination and communication	The SFO would communicate and express customer's needs in a structured and objective matter, so then the SBO can interact and follow-up the need with its analytical skills.
Forces outside the Sales System	Operation	The SBO has a complete change in the organization please refer to ANNEX ITERATION III. The Center of Excellence is now an organization and adds knowledge to the database about customer, products and competitors.
	Pricing	The pricing strategy and management is now part of the Strategy, Planning & Management organization.
	Channel Strategy	All partners and channels managers interact over the Channels Operations and BI team.

*Table 9. Effectiveness drivers- Iteration III*

ITERATION III			
Organization	Manual Process	Automated Process	Automation Rate
Sales Front Office	3	1	25.00%
Strategy, Planning & Management	22	0	0.00%
Business Control	21	0	0.00%
Center of Excellence	1	49	98.00%
Total	44	49	52.69%

*Table 10. Automation Percentage - Iteration III*

#### Fourth Iteration.

Before the creation of the next iteration, the concepts from the interview were analyzed using the Atlas.ti Network analysis where it is possible to see how many times certain concepts have been repeated by the G indicator. For this iteration this research will explore two concepts, the first is the definition of effectiveness because it is important to understand what perceptions the SBO and the SFO team have about the effectiveness of the as-is process and what improvements the to-be process needs to address, the complete mind map can be found in the mind map effectiveness definition in Annex III. The second is the effectiveness measurement, this research will explore the indicators that need to be present in the “to-be” process to correctly measure the effectiveness, the complete mind map of this analysis can be found in annex III effectiveness measurement. The results are explained as follows:

- The effectiveness of the Sales Organization is directly linked with the strategy that is set by the C-level organization of the company (G=2), this concept has properties such as the idea of simplicity which influences the effectiveness (G=5) and the inclusion of distributors in the strategy (G=2). Moreover, the correct strategy causes the correct use of technology which enables the effectiveness of the organization (G=4) and the effectiveness of SBO (G=5), the correct use of human resources (G=3) and the access of information (G=7) seem to have an impact on the effectiveness of the SBO. These concepts are also interconnected since sharing and accessing information with the correct technology help in the education and inclusion of distributors according to the channels plan.
- The concept of productivity appears in the definition of effectiveness of the sales organization (G=4) and of the SBO (G=1), it is important to remark that the productivity

perception is linked to the generic sales process of prospecting, pre-approach, approach, sales presentation, handling objections and overcoming resistance, closing the sales and sales follow-up (Moncrief & Marshall, 2005).

- c. The difficulty in defining the effectiveness in the SBO (G=4) comes from the subjective approach that the SBO uses to determine the effectiveness of its process in the process as-is. This will be addressed in this iteration explained below.
- d. The SBO effectiveness measurement is not objective (G=6), this is because in the whole SBO organization there is not a unified concept of it. For example, in some cases, it was expressed that the effectiveness was measured with the use of emails (G=2) or feedback from the SFO and stakeholders (G= 4). Thus, there is not a clear KPI that measures it (G=4) in the context of the SBO completing services required by SFO or the customer.

To address the point below this iteration proposes tasks, roles, and new automation processes in the SBO organization, this new process is detailly explained on ANNEX IV Iteration IV. The concepts used for this iteration were the coordination and control, the Adding value principles and the drivers of effectiveness explained in Chapter 2 of this research. Additionally, the organization design is proposed according to the following team structure:

- I. Strategy, Planning & Management: addressing point a. of the interview analysis and because a correct strategy enables effectiveness over the SBO and the sales organization there is a new task called SBO strategy, this is a task where the Sales Operations and the Channels Operations teams will agree on a strategy to ensure the inclusion and education of distributors, the correct use of human resources and the way all the organization share information. There would be an increase in resources in the definition of the structure.
- II. Business Control: This organization has now all the approval activities and is the source of control of all the task that the Center of Excellence perfume, there is a new task called SBO Control Center which is the source of KPI control and measurement of the strategies set by the Planning organization. This is set to address the point c. and b. of the interview analysis; it also covers the relationship control over all partners tools and the approvals the machines require. To address point d. of the interview analysis this iteration proposed the creation of a task called Sales Desk Database & Report Management, the objective is to record and create reports over the activities performed by the whole SBO office, this information will give an interesting insight into the performance over requirements to the pre-sales and post-sales automation systems, with this information and the feedback from the SFO is possible to generate objectives KPIs to measure the effectiveness and efficiency of requirements.
- III. Center of Excellence: the main objective of this iteration is making the Center of Excellence a source of information about the SBO process. The control points would be defined in terms of the number of exceptions, simplicity, distributor participation, use of human resources, the velocity of the reply and the time it takes to solve the certain requirement. Moreover, data governance will be part of the responsibilities of this team following principles such as the control of technical data problems, implementation of projects and the creation of a program for the governance of the system.

<b>Technology Adoption</b>		
<b>Automation Principle</b>		<b>Iteration IV vs Iteration III</b>
Prepare the IT department & Develop IT capabilities		On this iteration the IT department needs to involve in the interaction between different databases for the reports, CRM, Clari, Hadoop and Sales Desk databases need to be accessible and have the same structure to create dashboards and reports.
Select Processes Carefully and Measure Improvements		The processes that will work with the automation tools are now described in the organization definition. ANNEX Iteration IV, in this iteration in the Center of Excellence there are processes in purple, these are the ones where the RPA will interpret the process designed over the business need.
Re-Think Talent		Teams working in the Business Control organization now have more proactive tasks such as pipeline and forecast management. On the other hand, the reactive ones are either approve applications from the system, approve new processes or attend exceptions.
RPA center of Excellence		The center of excellence is now the owner of most of the control and management of the automated systems and the data governance of the complete solution.
<b>Business Adoption</b>		
<b>Salesforce Effectiveness Driver</b>	<b>The cluster of Sales Management Decision by Impact</b>	<b>Iteration IV vs Iteration III</b>
Definers	Salesforce design	People in the SBO will now be able to monitor their performance according to the KPI created by the strategy team and managed by the control team.
	Structure and roles	New roles like Sales Desk database and report management are introduced.
	Salesforce size	No increase or change in the size in this iteration. However, this new configuration will help escalate team in both the SBO and the SFO according to the strategy they need to follow.
	Territory alignment	There is no change in territory management in this iteration.
Controllers	Culture	The measure of performance-driven by data is a change from a subjective measure of effectiveness to an objective one.
	Sales managers	Sales Managers now have dashboards and reports created by the control organization to measure the performance of their team in terms of productivity of tasks you need to perform to start and close the sales cycle.
	Compensation and incentives	Compensation and incentive have historic data to compare different territories and different sales representatives.
	Performance management and measurement	With the implementation of control and strategy tasks specialized on the performance of the SBO team and the feedback gathered from the SFO we are able to measure different aspects of the sales cycle.
	Goal setting and forecasting	The forecasting process is on the control team and this is due to the constant revision this process needs.
	Coordination and communication	There is no change in communication methods. However, on the coordination part there is more involvement from the strategy team into the KPIs.
Forces outside the Sales System	Operation	The SBO has changed please refer to ANNEX ITERATION VI. The SBO control center and the sales desk report tasks are more proactive than before.
	Pricing	There is no change in the pricing process in this iteration.
	Channel Strategy	All partners now are also measured in the sales cycle, therefore, their productivity KPI is related to the effectiveness of the SBO organization.

Table 11. Effectiveness drivers- Iteration IV

ITERATION IV			
Organization	Manual Process	Automated Process	Automation Rate
Sales Front Office	3	1	25.00%
Strategy, Planning & Management	19	0	0.00%
Business Control	24	0	0.00%
Center of Excellence	3	50	94.34%
Total	46	50	52.08%

*Table 12. Automation Percentage - Iteration IV*

#### 4.9. Process To-Be

After all the iterations were explained based on the research guidelines, this study now presents the final version of the artifact, the Process To-Be including the interaction of the different organizations, teams and systems. To design the final version of the iterations this research will explore and analyze the complete mind map of the process to-be which can be found in Annex III. The results are explained as follows:

- a. Structure information to avoid confusion (G=7) includes a higher involvement of data governance over the information that is presented over the systems but also means the correct distribution of requests to each team of the SBO. This concept has important properties such as Price quickness (G=5), Price accuracy (G=4) and the access of the distributors to the discount systems (G=3). Those three concepts are intrinsically related to the effectiveness of the SBO reply to key requests that influence the final customer perception and SFO performance.
- b. The machines need to be adjusted (G=3) involves properties of process management such as redesign, analysis and modeling. Achieving a comprehensive strategy to tune the systems according business needs will impact properties such as: Translate from business cases to machine rules procedures (G=2), Providing and specific business insight according each SFO needs (G=3) and recognize urgencies making a distinction between different account levels.
- c. The inclusion of an automated system is a challenge that need to be addressed, such as the frustration of the SFO and SBO users if the systems don't work correctly (G=10) or the possible increase in the process complexity that will be translated to user frustration (G=7). The errors on implementation or performance must be solved in a timely matter and all the new processes or improvements need to be tested rigorously before publishing them.

#### 4.10. The Interface

In the preliminary design, the interaction between the SFO and the SBO is explained in figure 13, this was maintained throughout the iterations and now the interface itself will be presented and explained. The REQ BOT, in other words, the machine where the SFO introduces the requirement and controls the completion of tasks. Here the SFO will have all the information about all the possible requests they can make over the interface, this would increase the education of both sales representatives and partners over what requirements are key to complete a task especially in the Pre-Sales and Post-Sales organizations. Moreover, to address point a. of the interview analysis, this REQ BOT will increase the information exchange speed and reliability between SFO, Partners and SBO increasing the information shared about market information and strategy, at the same time, the exchange will feed a database made out of

information from customers, products and competitors would be organized in a simple and integrated repository called “Sales Back-Office Database”, from this database the control team will be able to measure different types of KPIs related with the performance of the organization and the influence over the sales cycle. With the analysis-ready, reports and dashboard could be created and presented to the strategy and planning team, who would be able to define effective and efficient goals. In addition, this could also be used to escalate the service the business requires according different territories and industries, for example, if there is a new strategy to increase the amount of sales representatives attending the France food manufacture industry, the Planning team will use historical information to forecast the amount of support they would need from the SBO team which includes the support from the RPA teams such as the Post Sales Bot. Equally important is the description of the interface itself which is summarized in the following figure:

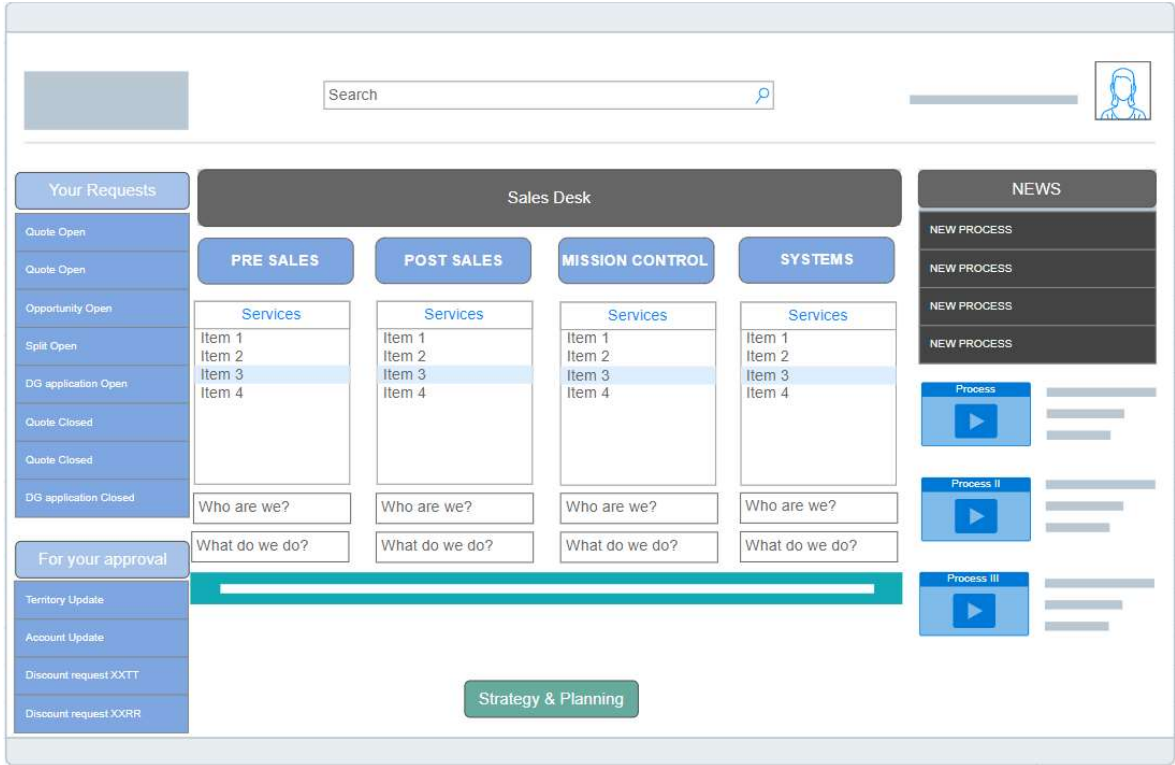


Figure 16. Sales-Desk Interface p.1

At the top right of the interface it can be appreciated the login system whose purpose is to identify the type of user according the hierarchy or PAN. For example, if the user is a Regional Manager, she will be able to apply to more requirements than a BDR<sup>10</sup>, under the same principle a partner will be able to apply for fewer requirements than an account manager. It is important to remark that each employee and partner have to be allocated in a hierarchy maintained by the Data Governance team. On the left of the interface there is a control list to check over the requirements that are opened, if the user needs more information, clicking on the link will take her to a summary of all requirements which can be sorted by date, status or current handler. In the middle is the complete view of the “Sales Desk”, here all the possible requirements are displayed below each title. Moreover, the service list can be accessed to check over more services and more information about that type of service. There are links that will take the user to more find out more information about the teams, this will include the complete diagram of

<sup>10</sup> Business Development Representative

the process, the approvals and the time is expected to be concluded. On the right of the interface is the news tab where all the new processes will be displayed after they are ready to be used, and below there is another tab with educations videos about best practices and how-to interaction with the Automation systems. According to the requestor role the interface will show the approvals that need attention and the Strategy & Planning definitions or updates according the requestor's region.

After the requestor decides over the type of requirement it needs, the second part of the interface will show more details about the whole process as the figure below shows:

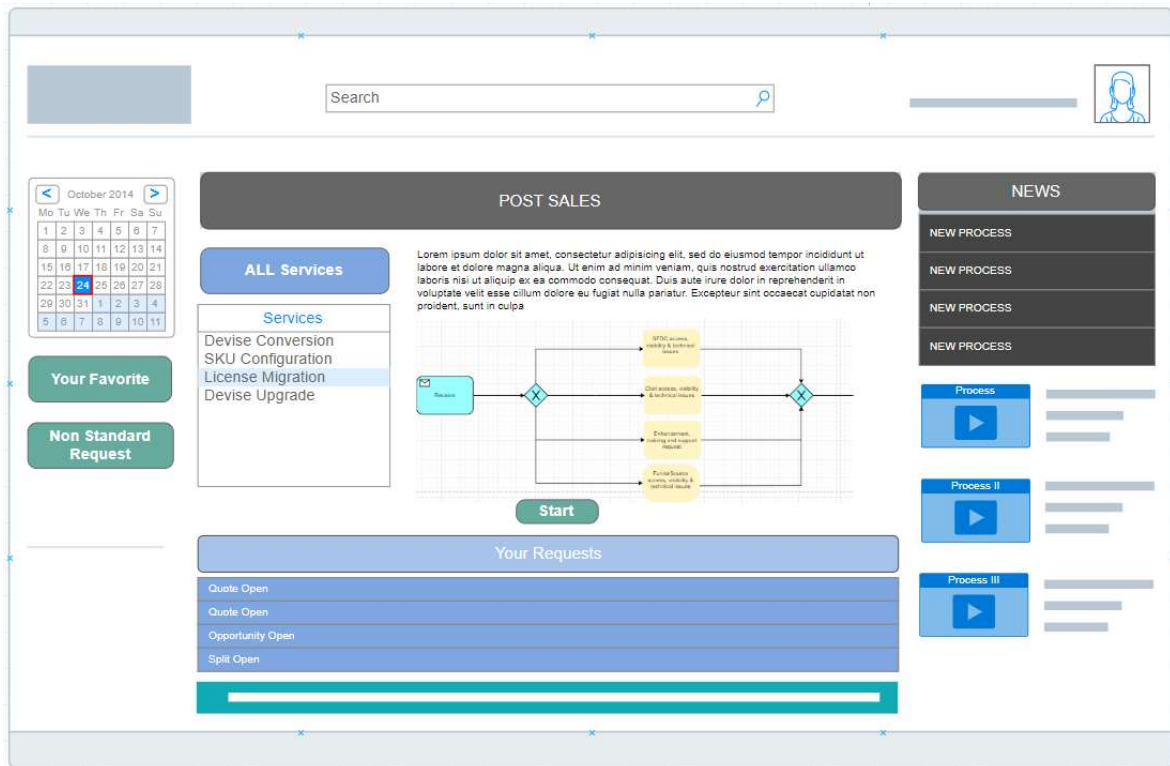


Figure 17. Sales-Desk Interface p.2

The new features in this part of the interface show a calendar where the requestor can check the time when the request when submitted, and a button to apply for a non-standard request for that specific team. After the requestor selects the team where it wants to start a request a new middle content where all the tasks the team performs are listed in a menu, after an option is selected, a detail shows basic information about the task and in what cases it is used for, including the complete flow and approvers.

Now to complete the presentation of the Sales Desk interface is the screen that the SBO will see after they log into the system in the same interface, the sales desk control panel will show all the possible requests over the 3 automated systems. Under each team the tasks that were submitted will appear, when they click over the option the SFO will have view the information of that request under the label for your approval, then basic data is displayed according to the type of request. On this quick view of the request, there are also history and the impact about that specific request over the account or over the territory depending on the need of the process.



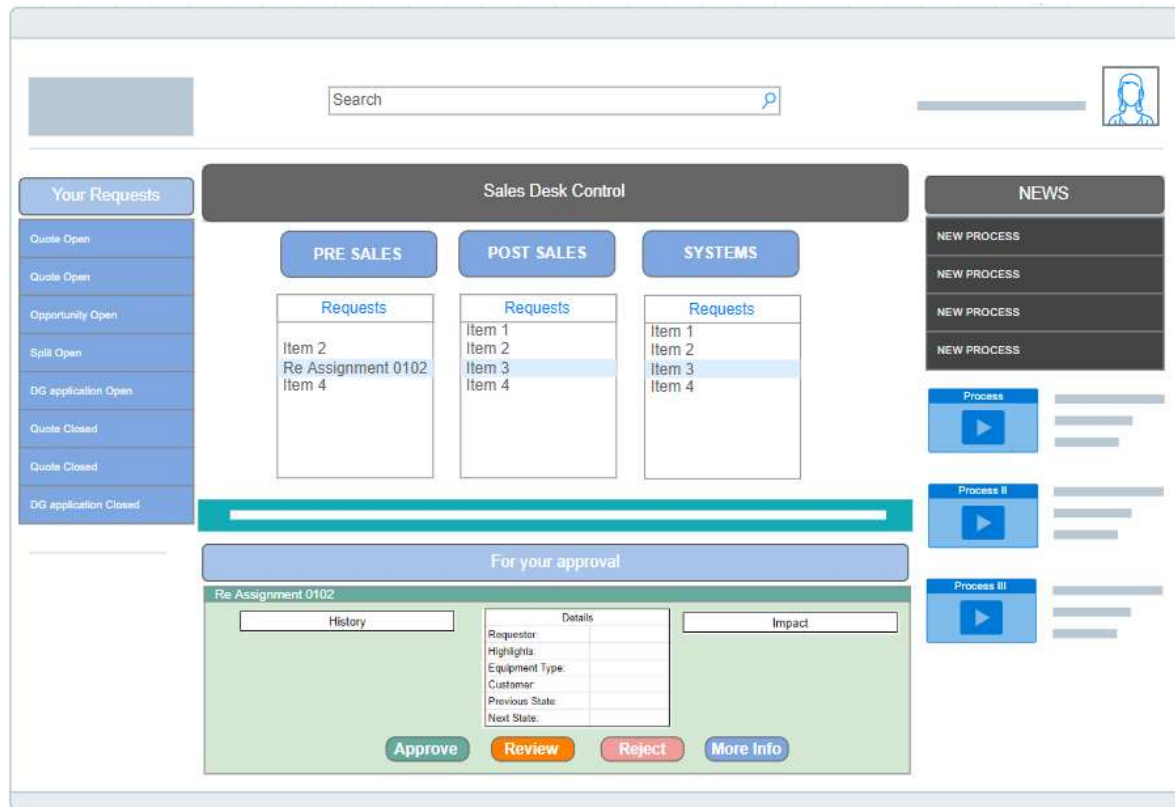


Figure 18. Sales Desk Control Interface

There is also two extra option, besides approve and reject, that the SBO professional can select. The options review will send the process to the Center of Excellence to check it over for updates or wrong configuration, and the More information tab where the approver will find more information about the historical requests related to the account, territory or industry and the possible implications it would have if approved.

#### 4.11. The Request Bot

As it is described in the Process As-Is there is not a system to manage the requests sent from the SFO. Because of this, the first step in the automation process is to create a Shared Service application, the idea can be perceived as another costly IT project which needs a high level of investment. However, in this case, Palo Alto Networks has some advantages to implement this solution, one of the main objectives of the business is “Automated and Simplify” this means the C-level strategy will consider ways to make the selling experience easier and simpler. Secondly, PAN has already an intranet to share and ask information about different teams, this is a website-based application called The Loop where all employees can log in and explore the business activities. With this in mind, it is important to remark that the Request Bot needs deeper access to the backend of the system (website server), involving the reengineering of the request process and the interaction between user and application. This means the introduction of new processes and subprocesses to manage the requirements over the interface. Therefore, the Request Bot would use the BPM framework to route the requirements to the correct team within the organization, this is meant to organize better the SBO in terms of procedure ownership and would solve the uncertainty of the process, tasks, and measurement. The information exchange between the automated system, the SFO, and the SBO is explained below:

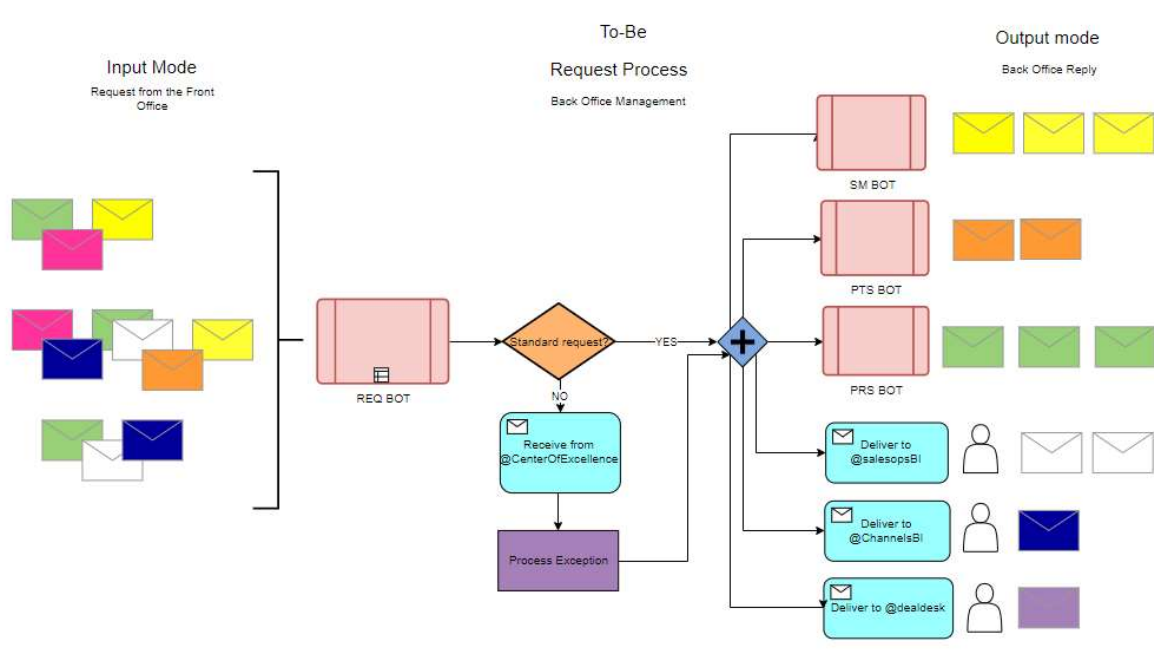


Figure 19. Interaction SFO-Request Bot-SBO (To-Be)

The previous flow shows how the requests are handled in the To-Be process after the implementation of the automation systems, the Req Bot is where the all the message is routed to the correct team according to the nature of the requirement. The rules, KPI and processes are defined by the Center of Excellence team which also manages the non-standard requests. The way this team manages all the tasks to design, redesign, model and publish automation processes involves the use of BPM and AB-BPM methodologies, which at the same time solve the concerns showed in the point b. of the interview analysis of this section. More specifically, explained in the following figure:

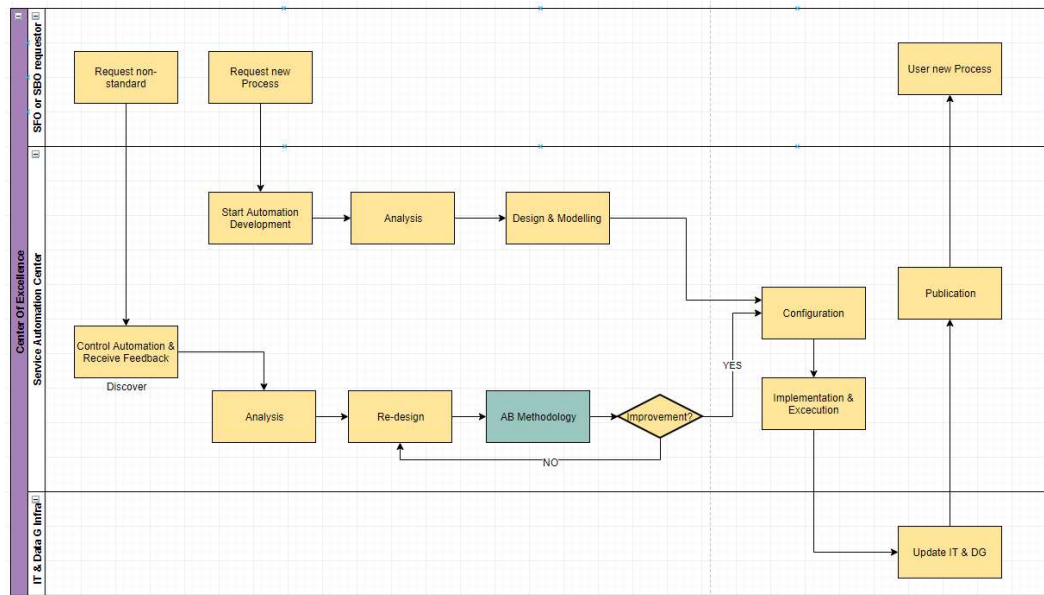
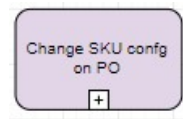


Figure 20. Center of Excellence - Process

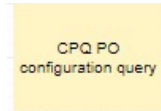
Effective design requires knowledge of both the application domain (e.g., requirements and constraints) and the solution domain (e.g., technical and organizational), for this specific case

the solution domain consists in the implementation of 3 RPA solutions to handle the requests sent by the REQ BOT interface. The reason to use RPA for these 3 cases is that the Post-Sales, Pre-Sales and System processes have high transaction volume, high level of standardization, well-defined implicit logic, and high maturity. Moreover, this automation framework uses existing applications to work over the presentation layer through a lightweight integration method, in this case, the automation system would get systematic and precise requirements over the REQ BOT and would only need to read over the defined business process to complete the tasks over the CRM CPQ or Data Governance interfaces. Likewise, these 3 RPA systems have 2 different types of tasks:

- a. Processes where the RPA needs to follow a complex process which is described by the center of excellence based on the business requirement, it is the responsibility of the of each bot to follow the process, completed and sent a completion email. In this example a change of SKI configuration over a PO would be followed by the Post-Sales system, the system also requests any kind of approval if need it.



- b. The process where the RPA follow a less complex process which usually is about information about a product, shipping, delivery or policies. In this example, the Pre-Sales system would answer the inquiry about the correct configuration over the CPQ system and the correct interpretation of the PO.



To sum up, the process “To-Be” has 4 automation systems which interact with each other and with the current systems used by PAN like the CRM and the CPQ systems. This relation is explained in the following graph:

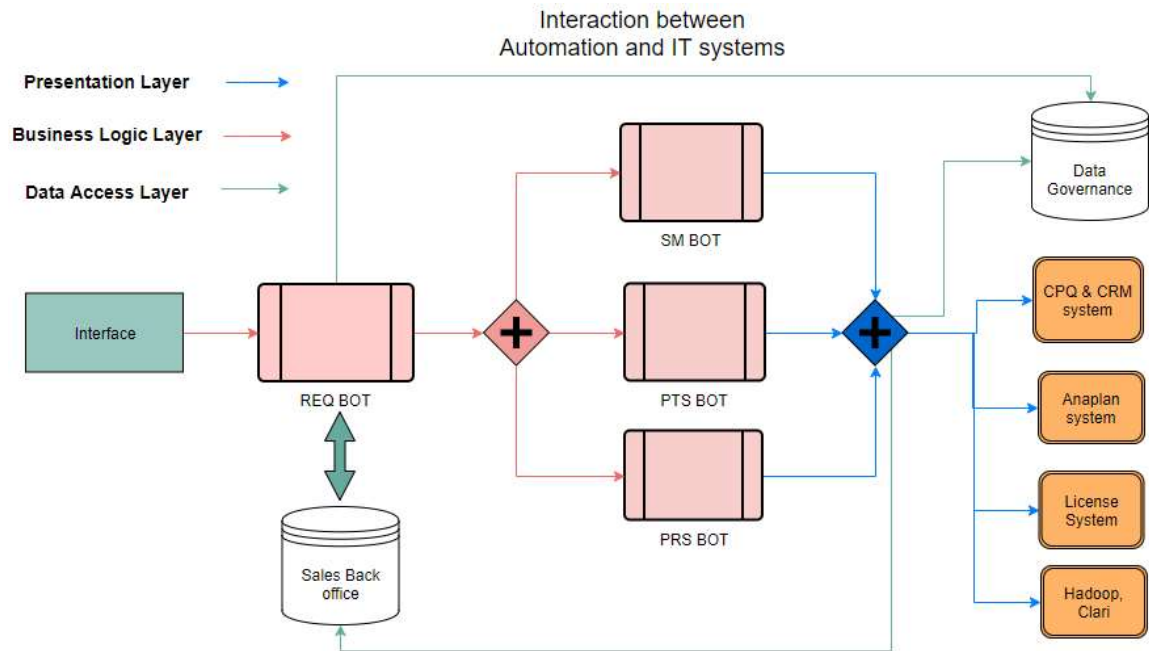


Figure 21. Interaction Between Automation and IT systems

With the final arrangement between automation systems, existing systems, organizations and teams this model has reached an increase in the automation rate of around 50% compared with the first iteration, this suggests more than half of the SBO tasks are now certain, follow a rule and are easily audited. This is translated into quickly request management, higher consistency between strategy and deployment, and an increase of the time SBO professionals spend on reactive tasks to give more attention to reactive tasks such as a deal desk and pipeline management. Moreover, this arrangement has principles such as process simplicity, service autonomy, process standardization and information consistency, all of them to overcome the challenges described in point c. of the interview analysis of this segment.

## Chapter 5 – Analysis and Discussion

The Design-Science research for information systems framework was selected to carry out this research developing an automated process solution for the sales back-office processes of a cybersecurity company, considering the process automation guidelines.

The results show that process automation technology applies to Pre-Sales, Post-Sales and System Management requirements of the SFO of a cybersecurity company. Results also support that adopting several automation solutions across the organization will create a new SBO architecture model.

The results also show that adopting process automation technology in a multi-channel strategy has positive impacts on organizational education, organizational control and efficiency of the sales cycle. Therefore, automation influences the salesforce effectiveness drivers such as the Definers, Controllers and Outside Forces. Based on the analysis made of the interview with sales and operations experts, using automation systems over sales back-office processes have the following influence over the sales process:

- I. A higher sales force alignment and a better control due to the use of the request interface instead of email. The previous systems limited the SBO from managing the requirement traffic and confuses the SFO about the ownership of the process. This in turn ensures better coordination between different SBO teams and the communication between the SBO and the SFO, who is the ultimate responsible for the account health. This new arrangement minimizes conflicts between teams and facilitates conflict resolution such as compensations and territory management. The reliability of an automated system ensures to users that their request will be handled with no exception, this has a deep impact on the culture of the sales representatives who were used to send follow up emails and copy many teams on the email to get attention. The coordination and communication are important to ensure the problem solve capability of the SBO. Making the organization a source of solutions which is later perceived by the final customer as an effective customer service (Baysan, et al., 2005).
- II. Because these new systems are constantly saving information about the requests from PAN employees and partners, a better strategy is possible. More information about the pre-sales cycle is available to analyze across industries and territories. Information about the strength and weakness of the selling cycle are linked to the performance of its salesforce and how fast they can present quotations of information to customer needs. In the specific case of discount approvals, the information about previous quotes to the same or similar customers can provide beneficial insight to the deal desk team which task is to equilibrate the customer retention and the health of the deal. This positive feedback can be replicated in the calculation of compensations when different teams act over global customers, this process has a direct impact on the Controllers performance which influences greatly the effectiveness of the salesforce (Zoltners, Sinha, & Lomier, 2008).
- III. Introducing RPA means a shift in the content of work. Robots can be used to amplify and augment human strengths, meaning humans will do what they can do best: handle all the unstructured parts of processes. The automation of ruled based repetitive tasks decreases the amount of time SBO spend on activities where interpretation, reasoning, and decision-making are not necessary (Lacity & Willcocks, 2016). At the same time automation, increases the time SBO spend over the control and coordination of activities to achieve the goals defined by the strategy team. Companies who deliver SaaS must ensure the correct measurement of

activities the customer needs to complete a purchase. The pre-sales team needs to, not only deliver fast quotations, but also ensures the profitability of deals without compromising future relationships with customers. This is where the pipeline management and the forecast management play a key role in the sales organization, the insight these reports, and dashboards provide are the main source of information for sales managers. Moreover, the effectiveness and efficiency of the pre-sales and post-sales service are defined and controlled against the productivity that is now measured in terms of time, cost and resourced used to close a deal. Questions such as: What is the time a customer waits for a quotation? What are the minimum and maximum discount you can provide to a customer in southern Europe? How much time does the customer need to update service or a license? How many deals are lost due time or price? How many deals are lost in different stages? What is the percentage of open opportunities with no quotation? What type of opportunities can add new technologies? What accounts are ready to renew the contract? What accounts are ready to update their service? What is the percentage of accounts with SaaS services? The amount of time SBO used to complete robotic occupations will now be used to address those kinds of concerns.

- IV. The implementation of a center of excellence creates a bridge between the business strategy and the IT goals (Willcocks, Hindle, & Lacity, 2019), especially when the teams identify new needs over the presales or post-sales process. Therefore, the tasks can be properly assessed and prioritized, and the ones with the most potential can be implemented first. Because RPA itself makes developing and modeling processes easier developers do not require programming skills but rather need to be acquainted with knowledge about business processes. Moreover, the AB-BPM methodology used to redesign current processes enables the deployment of new automation possibilities in parallel with the old version over different territories or accounts to gather information about the best suitable version for each customer. This enables the effectiveness of the opportunity management; it is possible that some processes do not apply to all countries or to all customers. Therefore, feedback from the sales operation's managers and SFO opens the possibility to manage different versions increasing the effectiveness of the SBO by targeting certain markets with the most suitable process. For example, in some bids in the middle east market are live auctions and need real-time feedback from the deal desk team, this situation is not the same in the North European markets. Whereas, bids for telecommunication or MSSP clients are more specific and need different commercial proposal depending on the technical changes over the RFI or the RFP timing.
- V. The Advisor Role, one of the main benefits of using automation systems as SBO tools is the new role of the SBO organization. In the Process As-Is part and in the first iterations the SBO organization had mainly reactive roles, this means the roles had tasks that were not forecasted or calculated and needed immediate attention to get solved. Moreover, these tasks are repetitive and do not need interpretation since they follow pre-determined rules, because the automation system will perform those tasks better and faster, SBO plays a different role which is described first as the approver of the tasks made by robots, as the optimizer of new processes according to business needs or as an Advisor for the SFO team. This concept is especially true in the pre-sales stage of the lead to cash cycle, the SFO professionals have the ability to approach a potential client and identify needs, nevertheless, they cannot decide over the commercial proposal unilaterally for different reasons and one of them is that they are not the owners of the data need it to define the price. It is important to

remark that while the SFO professional have a complete view of the customer, the industry and the competitors, it is still one aspect of the whole Porter's five forces analysis or of PESTLE analysis. In contrast, the SBO team have a view of the number of customers, the price sensitivity, the size of partners, the number of partners, the cost of opportunity, the legal aspects and the economic trends of an industry or region and can compare them with other similar regions. This insight makes the SBO a valuable Advisor when the customer needs to be approached with a comprehensive commercial strategy.

However, there are also concerns expressed by the experts and found on the literature review and the interview process which apply for this specific case where the implementation of automation systems would have the following deterrents:

- I. The sales organization requests were sent by email to the SBO, that is a legacy, this has created a culture where the common thing to do is contact all teams by email for all the questions and requirements the SFO or the partners have. Implementing a new interface would mean a change in behavior and a bet on the BPM system. The Req Bot needs to work all the time and must recognize priorities, if the process fails to meet expectations a big resistance to change would start because of the frustration of users (Willcocks, Hindle, & Lacity, 2019). Therefore, an important commitment needs to be done from the C-level increasing the allocated budget to the IT department updating their goals to meet the SFO expectations for this interface. Early involvement of IT can help validate the RPA software as appropriate, manage how the software robot access existing systems, and decide over the infrastructure availability, security, and scalability. This means a relocation of the IT resources to accomplish the implementation of all the automation systems. Henceforth, a new culture should look for long-standing adoption of innovation and technology.
- II. Even if the management of RPA does not need high programming skills or to follow a development method it is still important to create a new cross-team organization that manages the center of excellence appropriately. The training of the process modelers should be focused on business interpretation and process management. Moreover, they need constant communication with the central IT team to define the server and software support. Therefore, there is a need of new talents, they could be found within the organization with the use of Re-Think Talent methods, this part is hard and expensive because it takes a large number of learning hours, experience analysis and resource investment (Lacity, Willcocks, & Craig, Robotic Process Automation at Xchanging, 2015). A second option would be the recruitment of new members, this means the inclusion of other activities that need the support of the HR organization. Moreover, the roles and careers paths could be difficult to define due to the complexity of the process modeler role which is described as technology savvy but also business-driven.
- III. Sales Managers are the main controllers of the sales cycle and they rely on the information provided by the SBO. Because of the introduction of a new source of information is also the introduction of a new system to control, this could mean they have to figure out the best way to design steps in an end-to-end process that would make automation worthwhile and that will comply with the SFO expectations. If a human has to intervene at too many points of the automated process, end-to-end processing time may not be significantly reduced, this can only be noticed with KPI over all stages in the sales-cycle where SBO has an impact. In the current PAN SBO process, there are some steps could be taken out of the critical path and completed

at another time or completely be erased—they are just legacy tasks because “we’ve always done it this way.” This implies a global effort to first map all processes involving the SBO and then standardize basic processes. Then an analysis over each theatre peculiarities needs to be performed to create Theatres standards and procedures over the SBO processes. This joint effort needs resources in terms of time and that is always a scarcity of that property in the sales managerial circle. Therefore, they could only become sponsors of the plan, just committing other members to the completion of the process mapping.

- IV. Whenever automation was discussed there were two misconceptions that would need to be approached with all SFO and SBO members because they are perceived as true and would need resources and data to prove the opposite. The first one is the perception that an automated system would replace humans at work, this has been proven false since this is only a tool to enhance the use of human resources focusing their human abilities to perform more cognitive jobs. At the same time, these tools are not a black box where SFO would input their request and then somehow, they would get solve. The automation systems need close human attention and control at the beginning of its implementation until they are able to perform meeting the business expectations, and even then, they need to get regular adjustment according to different requirements, after all the SaaS business is changing every quarter. This concept leads to the second point which is, automation doesn’t happen overnight and needs a strong support of the whole organization at the beginning of its implementation. Organizations have multiple stakeholders, all of whom can support or derail RPA in some way. Gaining stakeholder buy-in means instituting strong change management practices from the start especially from the CIO who needs to understand the difference between RPA and applications development or a BPM solution. This implies extended meetings explaining the requirements, deciding over an in-house solution or a provider, selecting a provider, calculation over TCO or TVO (Willcocks, Hindle, & Lacity, 2019).



## Chapter 6 – Conclusions and Recommendations

### 6.1. Conclusions

This qualitative research case study generated a framework for the implementation of an automated system in the sales back office of a cybersecurity company using BPM and RPA technology and explored a set of concepts that helped to understand to what extent these tools could improve the effectiveness of the request management process performed by the sales back-office.

The Sales Operations team would have the biggest change in its structure since the Pre-Sales and Post-Sales processes are performed mainly by the PRS BOT and the PTS BOT explained in Annex IV Iterations. The pre-sales process can be automated to different levels but there is always the need to have a human decision over different commercial processes such as RFP proposals, approvals, TCO strategies, ELA&ESA definitions, EFS requirements, and GTM strategies since they do not follow specific rules. About the post-sales process, because a purchase order or agreement at this point is already accomplished, most of the tasks follow a rule and are repetitive. Easy to automated tasks are devices transfer, license migration, conversions, device upgrades and new information for delivery. That is the impact of automation in the Pre-Sales and Post-Sales processes.

Because the human operators will not have to deal with those tasks, they can spend more time to explore proactive tasks, pricing strategies based on PESTEL or Porter 5 forces reports and comprehensive partner's programs. With the information gathered by the system as it is showed in the Effectiveness Driver "Forces outside the Sales System" (Operation, Pricing, Channel Strategy) described in the Business Adoption table of each iteration. That is the extent of the improvement of the automation support task system in the sales back-office process, give the sales operator a new role as sales advisor, this concept is also supported by the analysis of the mind maps of "Concept Repetitive task definition" and "Concept Proactive Definition" in Annex III and analyzed in Chapter 4 Solution Design.

The limitation of this implementation was discussed in the second part of the analysis and discussion chapter, specifically, in terms of decision making and the translation of business cases to processes flows. In annex IV in all iterations it is clear that tasks such as strategy, planning and management cannot function with RPA or BPM technologies, they need human interpretation as it is mentioned in the mind map "Concept Automation Limits" in Annex III. That would show the limitation of the automation in the process To-Be.

Therefore, going back to the main research questions: **To what extent would the implementation of an automated support task system in a sales back-office process improve the effectiveness of a sales organization?** From the interview analysis and the process to-be we can conclude that the performance of the SBO organization is intrinsically related to the performance of the complete sales organization. Moreover, this relationship is seamless from the final customer point of view, because the customer sees the organization as a whole, the performance of the SBO is also perceived as the performance of the whole organization. Consequently, an increase of effectiveness in the SBO process is also an increase in the effectiveness perceived by customers, automation tools are able to increase effectiveness under certain conditions. The automation tools that would help increase this feature need to address the following effectiveness drivers:

1. Definers. The new sales force design should facilitate communication between SFO and SBO, structure and roles need to change according the interaction between humans and automation services, giving humans "decision making" roles. Territory alignment

- needs to be tracked and controlled by the Business Control team which manages exceptions the systems would not solve.
2. **Controllers.** The automation culture needs to help the organization to overcome frustration due to complexity. Sales Managers should be able to visualize the complete SBO process including compensation and incentives, performance management and measurement of the productivity of each SBO task. Moreover, goal setting and Forecasting need to be managed by the Strategy, Planning & Management team (Annex IV, Iteration IV) giving them more time to define comprehensive KPIs. Lastly, coordination and communication with SFO and partners are only through the automated interface.
  3. **Forces outside the sales system.** The automation system needs to map and track all tasks including the ones that are not automated. The pricing process needs to include the data from the SBO database, market studies according the client's profile and the channel's strategy.

These concepts act as a link between the RPA/BPM technology and back-office service management processes of the sales organization. We can conclude that the most crucial design parameters or the key decisions that need to be taken when designing an automated solution to increase the effectiveness of the sales back office are:

1. The alignment over strategy between the Sales, IT, Operations and Finance organizations.
2. The design, organization and management of a Center of Excellence Office.
3. The inclusion if the central IT department for decision over the automated systems.
4. The consensus over standard SBO processes.
5. The definition of new talents and teams for the SBO organization during and after automatization.
6. The correct and objective definitions of KPI regarding the SBO performance over the sales cycle.

The analysis of the results also indicates that an automated service management request system would free the SBO team from repetitive and rule-based tasks, in return, the SBO will have more time to perform cognitive work. For example the sales operations team will have more time to develop dashboards and scorecards to control the business according to the strategy, the deal desk time will have more time to develop comprehensive price strategies based on market analysis and the sales managers will have more information to adjust their sales strategy according their territory or industry comparing information with similar situations.

## 6.2. Recommendations

### For Organizations

According to the BPM maturity level (Weber, Curtis, & Gardiner, 2008) companies who are now in level 3 need to standardized all the processes of the SBO, to start any type of automation it is important to achieve the level 5 which enables innovation not only in the management of the process but also in the technology.

The organization who wants to implement this solution should not treat RPA as an experiment, this would lead to IT issues, process complexity, unrealistic expectations and a "piloting" approach. To maximize the impact of automation the C-level needs to commit its resources and shift the mind-set and approach from experimentation to transformation from the SFO contact to the SBO service.

The management team needs to make strategic choices – laying the right foundation to enable a “premium” digital workforce to support its drive for competitive advantage. Given the relative immaturity of the automation market, it is taking time for large organizations, to learn about and to adopt automation tools at scale. The following steps are key to achieve that goal:

- I. A complete mapping of the SBO process specifically to document shadow processes and non-standard request.
- II. Start with a bold ambition: the goals for the digital workforce needs to be structured for the next 5 years and make conscious choices to achieve it. In all cases, sponsorship has risen to the C-level committee.
- III. Build a strong foundation: Higher-performing robots operate with reliable data sets. This means, fast learning and less error-prone robots need data governance. The objective of the organization should be to create data governance teams that understand the SBO capabilities and the SFO needs.
- IV. Achieve high-velocity change: The C-Level fear of failure could be reduced since problems can be addressed quickly with the introduction of the Center of Excellence. Moreover, they have to be willing to cut through organizational barriers to rethink the definitions of various roles that perform repetitively and ruled tasks, transforming them into key players in the sales cycle.

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To Nerea, egun onetan lagundu didazu eta egun txarretan bikoiztu duzu laguntza.

Eskerrik asko indarra izateagatik, eskerrik asko maitasuna izateagatik.

## Annex I. Interview Details

### Interview Email Invitation

Hi (name of the interviewee),

I am currently working in the Sales Operations team in the Amsterdam office and I am also completing a **master program at Leiden University**. As part of my thesis, I am creating a framework to enhance the current sales operations process, I am arguing that **the back-office process could be more effective with the inclusion of automation tools**.

One of the requirements to complete this analysis is having interviews with experts of the sales cycle. **I would like to invite you to be part of this exploratory study that will start on XX.05.2019.**

This interview is anonymous, and it will be assessed by two university professors (Tyron Offerman & Werner Heijstek) who will ensure an ethical analysis of the information you provide. Moreover, attached to this email is the NDA agreement I signed with Palo Alto Networks to complete this study. **The duration of this interview is approximately 50 min and I would like to know if you have time for this in the next 2 weeks and if you agree to be recorded.**

Thank you very much for your support. Best regards,

### Interview Questions

#### Questions. For Sales Representatives (front office)

##### Part 1 Introduction:

Question	Background	Measure
What is your role in the sales organization? How many years?	Introduction of the interviewee Experience over the process, it is important to understand the different tasks and responsibilities.	The years of experience with the front-office team. The experience would be either as a process performer, designer or manager.
How would you define effectiveness in the sales organization? How do you define effectiveness in the sales back-office?	Adding value/Satisfying needs and adding value: the definition of effectiveness in the sales force is important and helps developing an artifact according to the definition.	Effectiveness is either present, not present, or partially present in some parts of the process. The concept they have about effective will also matter.

##### Part 2 Process AS-IS:

Question	Background	Measure
What tasks do you require frequently to SalesOps? Are those tasks repetitive? How.	To achieve successfully BPM results is necessary to also take in consideration standardization and automation of business processes and related methodologies	This will measure to what extent requirements are standard. They will either be possible or not possible to standardize, and therefore easier to automatize.
How often and how do you contact Sales Ops per week? What are the main reasons?	Planning: organizations must create some strategy to plan. First, they need to be aware of the future, the plan to reach business goals and decide who should do it, the stakeholders	This will help to measure the frequency and type of request sales reps have.
Do you get support any time of the day? What is the longest you waited? Is the reply effective?	Automated processes do not have working hours, however, not only fast replies are accepted, they have to be correct.	It measures when sales reps do not have assistance, what is the longest time they experienced and how accurate is the reply.

Are territories defined according to the sales rep's capabilities? Are quotas well defined? What do you think about the forecast definition in your territory?	One of the measures of sales organization effectiveness is the Motivation: only motivated salespeople can achieve business goals	This will show if sales ops are promoting a motivating strategy. Deliver motivating strategies effectively. Sales reps will either agree or disagree or partially agree with some motivation structures
How does the back-office performance affect the final customer perception of the company?	The final customer perception is very important to define the effectiveness of the sales organization.	It will measure the type of tasks are vital to ensure an effective reply to the customer.
What requirements or tasks are important to secure high effective response to customers?	The most important tasks need to be carefully analyzed because they influence the final perception of customers.	It will measure what type of tasks are worth automating and if they influence greatly the customer perception.

### Part 3 Process TO-BE:

Question	Background	Measure
When SalesOps implements a new process, do they ask for your feedback? Is that effective for the sales organization?	Iterative process lifecycle could be implemented to optimize the information flow, the process optimization is managed to be able to respond to the environmental changes and achieve consistent results	This will measure the effectiveness of the current Sales Operations organization in terms of improvements and to what extent the process is focused on sales representatives' feedback.
For rule-based requirements, would you feel comfortable interacting with an automated system?	Ruled base requirements have the highest chance to be automatized due to its low interpretation level, however, the system still needs to interact with humans.	Measures the comfortability to use a robot, from no comfortable to high comfortable or comfortable under certain circumstances How they perceived a change in the effectiveness.
What requirements do you think a computer would not be able to solve? do you need human interaction? Why?	Exceptions for automation are higher if the process is full of special cases, if there are cognitive tasks involve the automation is not possible	This measures how accepted is to work without the human interface. The attitude from not open to working with computers to very willing to work
Would that system increase the effectiveness of the sales organization? Why, why not, How?	The expert is capable to define if the implementation of the system described in the to-be process would have an effect on the effectiveness of the sales organization.	This will measure to what extent an automated system would influence the effectiveness of the organization. The experts may feel the implementation will not bring an important change to the current system or it will not satisfy the front office definition of effectiveness.
What process or tasks would you change to increase the effectiveness of the sales process? Of Sales operations?	Because sales representatives are in constant interaction with different customers, it is important to gather their thoughts over the "to-be" process	It will give insights about the type of tasks the front office believes are important to improving the effectiveness.
In a perfect situation, what kind of sales ops (back-office) insight/information would help you close a deal easily?	(Coordination, controlling) The sales management team needs to motivate, develop a close relationship, promote direct contact among the organization and guarantee the flow of information about the objectives	What is the overall expectation sales reps have, it will indicate also if they perceive sales ops as a reactive or proactive position
What kind of feedback do you expect from sales ops? Proactive and reactive tasks, what kind of report.	(Coordination, controlling) The sales management team needs to motivate, develop a close relationship, promote direct contact among the organization and guarantee the flow of information about the objectives	What is the overall expectation sales reps have, it will indicate also if they perceive sales ops as a reactive or proactive position

## Questions. For Sales Operations Analysts and Regional Sales Managers (back office)

### Part 1 Introduction:

Question	Background	Measure
What is your role in the sales organization? How many years?	Introduction of the interviewee	The years of experience with the front-office team.
How would you define effectiveness in the sales ops process? How do you define effectiveness in the sales process?	Adding value/Satisfying needs and adding value: customers sometimes don't know they have a need, and in this type of situation is where salesforce enters	Effectiveness is either present, not present, or partially present in some parts of the process. The concept they have about effective will also matter

### Part 2 Process AS-IS

Question	Background	Measure
What are the repetitive requests sales operations face regularly?	To achieve successfully BPM results is necessary to also take in consideration standardization and automation of business processes and related methodologies	This will measure to what extent requirements are standard. They will either be possible or not possible to standardizer,
How effective is the management of requirements over the inbox (all alias, sales ops EMEA, deal desk)? does it influence the effectiveness of the sales organization?	The management of the requirement is key to ensure the performance of the sales back office.	It will point what points of the request management are not performing according to the current standards of the sales back office. The effectiveness of this system will be either good or bad.
Do you have a proactive or a reactive role? How well structured are the proactive tasks you have?	Coordination: it involves principles and good practices to build up organizational skills, support the workers and help them to have a total vision of their activities and how to coordinate them with the team	It will measure the type of role sales ops perceive they do. Proactive are tasks that prevent or calculate future events, reactive are tasks that are performed daily without a forecast. This shows the effectiveness of their tasks within the organization. The structure would be good, bad, medium.
Do you think sales representative requirements follow a certain pattern? How often? Why?	Tasks that follow a pattern have a high probability to be automated	It will measure what tasks follow patterns, if they do, is the pattern repetitive or not. If they do not, why.
Under your understanding, what is the most challenging task you solve? Is it repetitive?	Repetitive have high chances to be automated according to lit review	The challenging tasks are mostly to create new information but then that info falls into a repetition. This will measure how repetitive is the highest challenge. High, medium-low, low, medium.
How do you measure the effectiveness of your support? What about efficiency?	Having measurements of the sales back-office process is important to control the performance of different teams.	The measurement taken here is the perception of the current process and how effective it is in the perception of the users.
How does the back-office performance affect the final customer perception of the company?	The performance of the back-office is directly related to the perception of the final customer.	This measures how aware is the sales back-office team that their performance is directly related to concepts such as customer satisfaction.

### Part 3 Process TO-BE:

How does the information you produce help to create a better sales strategy?	Database and knowledge management: the information gathered from customers, products and competitors should be stored in an organized, simple and integrated repository. Salesforce needs to be able to use and create databases to store information and generate knowledge from it	It will measure the awareness they have about the task they perform, they either know, do not know or partially know the impact within the sales organization. This shows the effectiveness of their tasks within the organization.
What is your perception of repetitive tasks? What percentage represent in your week?	If a repetitive task takes over the day of a sales ops. They have a higher chance to be automated so they would focus on other important tasks.	It will measure what do they think about the repetitive tasks, if they exist or not, how are they and what is the percentage of repetitive job they have
What processes would you outsource if you have the power? Why?	If the process could be outsourced, there is a high possibility it could be automated.	It will measure the processes that clearly seem s either simple, repetitive, dull or not challenging.
Would you automate rule-based tasks? why?	Perception of automation in the process management.	It will measure the acceptance sales ops have for automated systems high, medium, low.
What tasks are impossible to automate? Is human interaction need for those tasks? How complex it is?	Mostly cognitive tasks and creation of new knowledge is impossible to automate	This will measure according to their experience what tasks are hard to replicate by a computer. The complexity could be low medium or high.
In a scenario where a repetitive task is performed by robots, what tasks do you think sales ops should do? Would the effectiveness of the responses increase?	RPA reduces time spent on repetitive activities, it increases productivity, efficiency and customer relationship quality and improves quality and speed of communication within the organization.	What other tasks they are able to perform better with this tool. How they perceive their work with this tool. Easier, harder, more time, less time.
Would you increase the effectiveness of your role in the sales process with the use of automation tools?	Automation enables accelerated mobility, productivity, and efficiency of salespersons.	What other ideas they have to increase the effectiveness, this will measure if the implementation of automated tools would increase, decrease or not have an impact on the sales ops.

## Interview Transcriptions

### Epsilon Interview

Interviewer: OK thank you very much for having some minutes with me and I would like to start with the first part which is just a general introduction so what is your role in the sales organization and for how many years.

Interviewee: Yeah, I've been here for three years and I did sales operations manager role. That was covering. The field. And I started with emerging markets are now covering North European and Eastern European market.

Interviewer: How would you define effectiveness in this sales ops process

Interviewee: and simplicity. As long as the process is simple, and someone can understand it from the time it is explained the minutes explained. I would say it's an effective one.

Interviewer: And how do you define effectiveness in the sales organization as a whole.

Interviewee: Well that's a broader question, for me. I call it productive. Maybe that's a non-term in sales productive account manager is an account manager who can generate more dollars in a Shorter period of time. So this is and where he can drive less cost in that said that we call it productive. This is a term we use in sales not effectiveness but productivity.

Interviewer: Okay okay great. Let's move to the second part because I want to know more about the tasks that the sales operations and the back office have. So, what repetitive request do you face regularly

Interviewee: requests related to the sales process. Back end. The sales process back end is the minute you you start creating. Something for the future which call it then opportunity the minute you start saying that I'm going to do this and then that you

caught it then you book it then you ship it then until the customer is happy that is too many steps that can be very repetitive. So yeah

Interviewee: I mean there are a lot of repetitive because pretty much all deals and opportunities follow the same rules.

Interviewee: Exactly. So there will be many repetitive things during this whole cycle. Yeah. So I can start with the minute I'm thinking or dreaming to sell this thing to this customer.

Interviewer: Okay. So we can say that doesn't whenever since the moment you have a qualified lead

Interviewee: even a dream sometime

Interviewer: before the lead is created. Okay understood. So you get all these requirements through the email personal personally emotional and you get them through their salesops inbox and phones of course. So how effective is the management of requirements over these inboxes over all the aliases.

Interviewee: Very. What's the other opposite word of effective. Noneffective. They're pretty immature primitive basic way of handling that. manual too manual to manage that since it is not Right. Yeah.

Interviewer: Okay. So do you think that the management of these inbox and the management of these requirements influences the sales organization as a whole.

Interviewee: Yes. Yes. Because we've been into so many cases where salespeople get lost and actually we have incidents where. A simple thing get lost is through the aliases and at the back and then the customer shouting. So of course, whenever the customer complaints then there is something wrong with the process.

Interviewee: you know The process is not effective enough because everything we do at the end we need to have satisfied customer. Yes. Everything we do. And if he if we run into some cases where things got lost simply because we have all these aliases that we don't manage well and at the end of the day it affected our customers so yes. OK. I lived in some of these cases so I know it isn't.

Interviewer: Yeah so we can conclude that the organization itself can be. And it's the organizational performance is a variable of how well you're handling their requirements.

Interviewer: Exactly.

Interviewer: Yeah it's clear. And that leads me to the next question which is do you think you have a proactive role or a reactive role. And why do you think

Interviewee: I have a mix. Because sales operations it's a wide role. It could be proactive. It could be very reactive. So in terms of a proactive since sales operations cover what is called the planning and forecasting you would know more details than anyone else. So once you know these details you can take a proactive action to correct something out of proactive action to advise that let's not do it this way or let's fire this guy if that's a proper word to use or let's and let's not sell this product but sell that products. That's a very proactive reactive action is because it depends on when we receive a request and again because we've been handling ourselves people who and we are in the field with the first interface with the field so if there is anything that happens we will usually get it say again a box that got lost we will get that and that's the reactive action basically because we were not proactively tracking when you have that guest go do that thing. So of course, yeah that I to be active. So my work is mix.

Interviewer: Yeah it will be more like a 50 50. Would you say.

Interviewee: No, I would say that I'm more proactive 70 30. And it involved my time. So if I can maybe three years ago it was 50 50 no it is 70-30.

Interviewer: I know all these proactive roles or task that you have mentioned how structure are them in the wholesale sales ops organization

Interviewee: Not very structured, and I have some examples that I think we should have been very proactive, and we chose to back off. We should have acted proactive. So I would say not very structured. So we in sales ops, We lack something which is the program and the program is when you when if you have the program you get more proactive but to define of the program you need to know what is happening in the field. I'll give you an example to make it easier, tech refresh for example, finish putting something when you have all the boxes and. Then. it's not right to keep a customer with an old box. We in sales operations. We have a view on everything. So we can't easily advise that, your know what your units are going to expire. They're all just get rid of them tried to position take refresh but that's a very wide statement. I can only forecast or give it as an advice and that is being proactive. But where is a program behind it. We didn't design the program and since we didn't design a program, we cannot approach why that audience I can't approach my audience for example because I know what they're working on. What's in mind. I know that what the customers have what happened in the past but I can't approach more audience because simply I don't have programs. So if I can't approach the audience early then I'm not proactive and I'm not creating that difference in the sales strategy or the sales process.

Interviewer: Yes, indeed indeed that does happen. This happens a lot. And that actually leads me to the next questions because you have proactive reactive roles these proactive roles may not be a structure, but you are trying your best to be proactive. So therefore, the reactive job that you have been you already know what you're going to be asked because you have already been asked these questions do you mention repetitive times. So do you think that these requirements follow a certain logic. pattern

Interviewer: Yeah I think so.

Interviewer: They they follow a certain pattern. So you could say that some people ask for some stuff after they close the deal although we're in a stage five. I know they're going to ask this exactly stage six. Yeah I know. And so on.

Interviewee: Even some of the stuff the programs that I talked about could follow a specific structure or what's the word you used a pattern they could fill out pattern. So there is a pattern in everything in life. Exactly. Yeah. So yes they could follow a pattern.

Interviewer: Yeah. So under these different things that you get some of them follow a pattern some of they may not fall. And some of them are reactive and proactive. What are the most challenging task you solve? What is the most challenging that takes you cognitive deep-thinking and. Actually having a. You do not do them automatically.

Interviewer: So I have to think about the hardest Thing I don't do it automatically. I would say forecasting my I think is the hardest thing because it has lots of future to think. And everything can go right. Everything can go wrong. You just can't guess. Yes there is a pattern in that. But how strong is the pattern. You can't get it. You will follow the pattern you will follow the leads you will follow the signals. But there is always something that will happen. So forecasting is the hardest thing. And then it might be the hard because I worked with very senior people as well and they might get it right every time every time every time. But there will be one time where they don't get it right. It will go out of this pattern. So I would say forecasting.

Interviewer: Yeah yeah definitely. Yeah. What do you think is the second where you spent time on analyzing something? Just giving your back of experience. Yes.

Interviewee: And the second will be that depends on how I received the request because sometimes I call them dirty requests. You receive a foreword of the forward of a forward of a very long thread. That happened two years ago but is still gone and gone in these infinite loops of aliases and you need to have it all in front of you and see what happened who did what. What is the origin of the problem. So that's the second difficult thing is and it depends on the way you receive it. So sometimes most of the times we we receive things from account managers like can you look into this case. He has no clue what is the case but he has a customer complaining and except he doesn't have the bandwidth to go and analyze it. So you need to go back to the history trying to understand what's happening and since the organization is growing and there are so many teams involved. Some people I think value some people are not adding value. Some people are repeating themselves. So you need to take that big big thing and break it into pieces to understand what's the root of this problem and try to find a solution. That's the second hardest. And it takes lots of time. OK.

Interviewer: Now it's clear it's clear. So definitely you have different. Approaches depending of what kinds of tasks do you have sometimes you go very cognitive and you have to negotiate, and have you had to speak with a person in a certain tone. You need to establish a relationship to clarify the focus and on the other side you're working on your own just trying to figure it out where everything started

Interviewer: for me relationship is so important because it makes you understand the person that's number one and forecasting and I'll go back to it. It depends on human behavior as well. And this is why you need to have the relationship and other thing about the other thing about the relationship is you need it. Once again with a big organization and your things can easily get lost between these teams. You have to have a certain relationship with this team to have your things done. And this is us as humans we accept some people, we don't accept some other people. We're professionals at the end of the day. But there is that the human touch that you accept this person you're going to help him.

Interviewer: Of course, of course we all have some internal biases. Let's put it that way. So this is so that's why I want to ask the following question is because you have so many different approach and you give so many different support called do you measure the effectiveness of your support

Interviewer: based on feedback. So, if I receive feedback Oh wow that's so fast. Oh thank you. That's all that or sometimes a customer e-mail telling. Thank you so much. It's finally deserved. I would say I am effective. Then again having have been doing this for a while I'm measuring myself sometimes, I would say I was non-productive this week because I can evaluate myself. I can judge myself but again feedback is so important.

Interviewer: Yeah. What about the efficiency. You have a way of measure do you differentiate effectiveness and efficiency in your daily role.

Interviewee: I have a to do list always. I would say I am efficient when I started them all. And by the end of the day I start them all. I don't have anything. I talk to all the people I got what I wanted, and I know what I'm going to do tomorrow so that I consider myself efficient.

Interviewer: Yeah. It makes sense. I think that we have just one more question for the second part. Will be how does the back office perform performance I want to talk about back offices is deal desk sales of stuff governance. How does a back-office performance affect the final customer perception of Palo Alto?

Interviewer: A lot. And how do you think.

Interviewer: Why do you think it is.

Interviewee: Because I've been into cases where again me being in the field and got me more exposed to what's really happening on the ground. So, I've been in two cases where. I talk to customers and they were running like headless chicken trying to have an answer from us but we couldn't find them. And then I'd get into this we get an answer then that changes its perception of us so we can make a difference. Then I've been into cases where for example we have to come with an offer now and then we wait for let's assume deal desk. If they don't act quickly that customer will not have it. So those guys are going to decide on someone else and these happen.

Interviewer: It's usually like that because we are in a world of the customers is gaining this ability to have us get to choose in our personal life, we're always buying things with one click. We are always comparing prices over will delivery. So, customers are always also doing the same when they purchase different services.

Interviewee: You've been into cases where the account managers are sitting at the customers just texting us. What if this happens. Can I get this pricing in Turkey for example? They do something which they call the auction for every deal. It's a real auction where you sit and say my Price is this then the Fortnite guy said no my price is this then the Checkpoint price is this then you have the Palo Alto guys I need to talk to my team I get that on the spot the auction if, I am not fast enough in wherever I sit in the wire. If I'm not fast enough, they may lose it, so it can be that extreme.

Interviewer: Okay so it's super important isn't this good to remark. Let's go over the past three because right now on the part two we covered the whole is the process now like how do you feel about it. and now we will talk about the could be. What could the process do. So how does the formation you produce how could this information help to create a better sales strategy.

Interviewee: Me again we're going to go into my second word which is simplicity. I try to be as simple as possible. So for me if I could do something simple that would give him an answer and he can easily read it and go the answer and get satisfied that's perfect. This is this is when I judge my information was helpful my information would be helpful. When I sit in the room and I put challenge with the help of my information by telling him "Oh you found only 12 POC. So what's going on where are you guys." So that's some good information because you can challenge people with it. Judge on that i can say my information is good my information is helpful.

Interviewer: Yeah yeah. That's where cells operate for the sales representative to have a clear view of what they're doing right and when they want to create a new strategy the future does what they say they want to discuss the future what kind of tactical data information would you give them.

Interviewee: And so many points it depends on what information we're talking about for example, you were talking about some discussions that we take on normal days because as salespeople they always want own on more accounts to achieve more money in the end which is a very normal sense people behavior but you need to take that discussion and be able to convince him that no he's mistaken. So one of the things we can't sit next to me and I tell him. I see that in this year you closed 90 percent of your business out of this account and you told me you want the 30 other so you know sit and tell me what you did in the 30 others because I see you did nothing that changes their strategy

Interviewee: of course, and shapes their head better in order to approach the customer also in a better way.

Interviewee: Exactly. And then again it needs some market knowledge. Oh look you have this account. I know in my previous experience that we could do this and this and that why you're not doing what you said. Show me where is your pipeline for example so that changes again their approach and their go to market.

Interviewer: Okay. Yeah. And that's definitely something that you need more time to develop because if you are stuck with some tasks, you're not gonna be able to deliver. The other problems that you just mentioned.

Interviewer: So in this sense in in a week what percentage represents. This repetitive tasks or administrative tasks that you do.

Interviewee: 50 say okay because we are trying to improve, we are scaling with more people not we are not improving the process itself.

Interviewer: No sometimes it is very hard to expand this if you don't know the clear vision of what is going on. So what process would you. What processes would you outsource if you have the power to do it tomorrow and why.

Interviewee: What process would I outsource I would outsource everything that touches the sales cycle after the fact. Which means when I told you even after you close and on there are still some things to happen and these things are repetitive in most cases that should be outsourced because it involves so many teams and it can be so diverse and it can't consume your time so massively. So that should be outsourced. And if it gets outsourced then you'll get much of your done back to the post sale.

Interviewer: After you close a contract and you deliver. Yes you're basically talking about license activation ownership and

Interviewer: loss of packages, ownership movement.

Interviewee: A customer who is who wants to buy another subscription but all of a sudden found that anyone. Blah blah blah. So that's after the fact and that can be answered easily not. Easily but can be outsourced.



Interviewer: Yeah definitely. I mean yeah and other people will be taking care of that which maybe have the day they feel more comfortable doing that tasks and you will be you will have time to perform the others so would you. after this Follows certain rules so for example if they want to extend a license you need to accomplish certain stuff to get this approved, so you follow certain rules. So would you automate this rule based tasks.

Interviewer: For sure I would. Okay.

Interviewer: But what. Why would you love to meet them?

Interviewee: Because they have one 2 3 to do. It's like a guide. One two three. It doesn't take a genius to do it. There is no human touch on it that you need the human to judge. Yes. Do it or don't do it. No. 1 2 3. It can be automated. Why wouldn't I want to make it something logic that if if you need to change it you can just update it on the exact.

Interviewee: There is not actually a judgment I should just mention so therefore you we have some other task that cannot be automated. What would you say are the impossible task to automate?

Interviewee: forecasting and it's actually interesting about forecasting. I don't know, if you know in Clari we have it's something like and AI tool we use to predict forecast. What's the forecast? And I've been watching it since the license was launched and I am always more accurate than that. So, you can tell easily. That cannot be outsourced because again there is a pattern, but the pattern can go wrong with forecasting that you cannot automate. there is certainly the human touch still need someone who understands the behavior of other people because there are so many stakeholders in that and forecasting and again affected big time. For example, in my organization I have 42 people who can affect the number that we reach in the end. So, you can't have them in the AI because every one of them is different. So forecasting cannot and planning. Part of it. Yes you can automate but part of it not, then again planning. If you want to automate it you better get your data right. If you don't have correct data just avoid automation. You'll never get it right.

Interviewee: Understood and we're basically done saying that the impossible task to automate it is because you need human interaction

Interviewee: human it intelligence human intelligence and human intelligence for me is how we understand the people and how you can't measure. Oh I had this in the past and I know it's not going to happen. Ah I know this customer and they promise us things they don't do it now.

Interviewer: And probably also emotional intelligence right. Like watching it and recognizing some emotions fear or maybe aggressiveness or nervous. Yeah all of that is involved too.

Interviewee: Actually, I was talking to Steve yesterday. It was so interesting that they had a deal of XX million, If I can mention that they had a deal XX millions, and the account manager was staying until the last day the deal is coming. The deal is coming. The deal is coming out of fear, out of fear, so see how our emotions affect their forecasting. It's something that AI cannot predict. That's something I've been watching in clari and it never got it right. Clari never got it right.

Interviewer: So of course, that's that's a weak point for Clari. So in any scenario where these repetitive task that we were talking about like the administrative staff maybe the post sales or some of the pre-sales tasks are performed by a robot like a seamless robot that some other team will control. So what task do you think sales operations should do or the back office should do

Interviewer: in a scenario where we have a robot doing things not even a robot. Maybe you outsource. it, You are not the owner of the task anymore

Interviewer: sales operations us should do you mean. Yeah.

Interviewer: Well what do you think. If you would have today's position

Interviewer: I should sit with salespeople analyze deals and come with that genius offer. This is why I see that I can add value because I've been in two cases, so many cases I've talked to so many people exposed to cases that for example that something happened in Finland and now it's actually happening in Sweden. So, I might use my Finland knowledge to feed into the Swedish knowledge. Think I can add lots of value there. Yes. And I've been trying to develop this. I even started visiting customers in the sense people because I think I can correct their thinking with that knowledge I have. So, the kind of completed each other they have the relationship and you have the smart offer because you have

Interviewer: two different set of talents. They maybe they are very good salespersons the legal one percent of product and understand the customer and you are the owner of the data and you can interpret these that they needed to make a decision over simple things.

Interviewee: For example, they might work with firewalls to sell to their customer. And I'm like Okay why didn't you think of ELA simple things that really make a difference in the same. But it really makes a difference so then I think I can add value plus the forecasting. That's not something we can walk away from as a as a company with the stock.

Interviewee: And plus, that now we need to grow. Each year and we have this requirement from the higher positions that we need to be more proactive on stuff. So do you also need to move new products like the cloud products right. Red lock and all of those.

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Gamma Interview

Interviewee: Of course you have to be 100 percent honest.

Interviewer: I am always honest. Great guy

Interviewee: So for the first part is the introduction so they are just basically very simple question. The first one is what is your role in the sales organization and for how many years.

Interviewer: So I'm the Senior Director for Sales Operations for Europe Middle East and Africa and I've been up since 4 years almost.

Interviewee: Great. In these four years you experience a lot of changes and you have also enhanced the process differently and you have an overview of all of it. So after this time how would you define effectiveness in the sales Ops organizations.

Interviewer: So the starting point was extremely low. The people were not fit for the roles. There were not significant enough resources to do the jobs the processes were ancient and manual, and the technology was insufficient. I think over time we addressed all of those. So I would say compared to other companies I've been at I think we're at the a lot the higher end or the people the technology processes. You could argue are still a little bit ancient for some things, but technology people and capacity are definitely solid.

At the same time it's difficult to compare. How is this compared to somewhere I was five years ago. Because technology has really leapfrogged and it's really difficult to compare. There was no Clari back in the days there was just other things that these companies might use today but they didn't at that time because it just wasn't there. So I would say improved heavily over time.

Interviewee: Okay.

Interviewer: Kind of. Just let me know if I'm answering something else that you're asking, okay?

Interviewee: For sure. Now I just want to grab all of your answers first the completeness and I think that I would like to know when you would say that the the sales ops process is effective. How do you define that concept?

Interviewer: That's really fucking difficult. Because I'm struggling to kind of isolate the process itself from the people that perform the process. So there is a lot of. Let me try. Let me try somewhere. We see that there is a lot of self service in the process. So anybody can extract a lot of numbers off your account guy you can search the entire system for accounts. Say account managers for other accounts. You can run your own reports. You can do a lot of things yourself. So that's fairly effective and that's kind of a decision as a company we did. Where there is access for all to a lot of things. So that's effective.

Interviewee: Understood.

Interviewer: You're gonna ask me the opposite question in a minute. What's ineffective effective so I'll say that. But the answer is pretty much the same. You have a lot of people pulling records and they're not experts so you can look and you can have five people looking for the same answers and then they'll come they'll come up with five different answers because they apply a wrong methodology or look at it a different way or whatever so that creates ineffectiveness as well because people are discussing based on their own findings whereas there is no like one way of doing things.

Interviewee: Okay. Yeah. I think it's clear now. And that leads me to the next question which is how would you define effectiveness in the whole sales process. Is it the same?

Interviewer: How do I define it or how do I assess it?

Interviewee: Define

Interviewer: So the definition for the sales process is that where it wherever you can have automation scale and technology that should be applied and human touch should only be there where it's it's necessary to make a, let's say, a decision that whatever technology cannot make for you. And that typically involves assessing the answers of a customer or whatever but the sales process itself as automated as possible it should look at data points if it's your forecast that should look at data points as many as possible then suggest things and then the human touch should just be validating what technology says if it's mapping an account to a parent. If it's making sure an authorization closes extended. All these things are an effective process here would be machine.

Interviewee: Understood.

Interviewer: Great.

Interviewee: Let's now move on to the path to which is some questions about how the process is right now. The first one would be what repetitive request cells operation faces regularly?

Interviewer: Do you think I know this better than you?

Interviewee: I think you do.

Interviewer: I mean that is the sales ops inbox and you've seen that a million times never even seen it but I've I can provide some general categories. So there is just no order or opportunity assistance whether that's applying discounts or mapping to a parent or splitting opportunities or updating authorization codes or whatever it is. Just order and opportunity level intervention that's one. Then there is comp splits and disputes reporting, forecast, compensation.

Interviewee: Okay and how effective is the management of the requirements over the inbox and when I'm referring to the inbox I want to include all the aliases for examples of sales of deal desk. How effective do you think it is.

Interviewer: Low to medium. I mean where we are today is. Maybe better than it was but it's it's a patch solution based on legacy that was first. Something existed then and was kind of rolled into the next and next and it's just a big snowball of search and people don't know where to go for what. So they basically fire in all directions until they get helped by an answer they're looking for. And that's kind of where Costa Rica popped up to say let's have a one place where things go and from there on their distribution into multiple expert centers. So I think we have the right idea but we're not there yet. Right now it's ineffective.

Interviewee: Okay. And how does this management of all the inboxes how does it influence the effectiveness of the whole sales organization.

Interviewer: Its effects it negatively because first of all if if you kind of revert to my first answer if you had technology to help people along the way they wouldn't need this thing at all. Because as soon as they get stuck with some kind of problem they're stuck. And maybe that allows them to work on something else. But in some cases then that's a blocking point and their productivity is stopped until they get it resolved. And they don't know how to get it resolved so they fire things and all kinds of directions just in hope of getting somebody do what helps them fast. And in some cases they hit the right person and three wrong ones so you have four people working on the same things and other cases zero. And it's just across the organization that that's a productivity killer.

Interviewee: Yeah. Yeah. In fact I agree with that. And I will like to take that point and then build over that because sometimes we face different requirements in which we take different types of roles. So in your role right now do you have a proactive or reactive role?

Interviewer: Mine or the organization's?

Interviewee: yours

Interviewer: So, there is a limit to how much of the sales process I touch. So I guess I have two things. My job is to build an organization that is proactive but in the end the things that reach me where I have to do something in the end approve something or decide something that's reactive and that's just the nature of what it is I can't really upfront decide who gets the compensation for a deal. I don't know what is yet. So I would say both on a topical matter it's reactive in terms of addressing feel needs. It's supposed to be proactive.

Interviewee: Okay and how structured are there proactive tasks?

Interviewer: Well I don't really have proactive task. I mean I spend 90 percent of my day trying to focus on what the organization needs and how we build that. But that's kind of it comes from the need I see today and for the future so it's a mix. But it's it's not more it's more designed and the data is a task because I don't have any tasks that kind of they belong to me that involve the sales office process. I'm not responsible for making changes to a quote or assigning an account. I'm responsible to make sure that there are people who are there that know how to do it and aren't able to do it.

Interviewee: Okay. Understood. Yes. And do you think the sales representative requirement are? Do you think they follow a certain pattern because you also get questions from them? Do you think they follow a pattern?

Interviewer: So obviously there are things they all have in common. Yes they follow a certain pattern. And they are reactive to the structure. We have kind of set up. For example, how we deal with multinational business we have certain rules and those rules they spark certain conflicts and questions and requests. So that's a function of that. At the same time you also have. At the same time where you have sales ops resources that are very embracing so to say.

You also have people that are higher maintenance where you have people that give you guidance but don't do things for you. You have many more self-sufficient reps. So yeah there's a clear pattern of what are the company's decisions and what resources are made available. Sales reps react to that. So there is a very clear pattern.

Interviewee: Yeah. Understood. That's definitely a concept that I have to work on deeply because there are some patterns that need to be follow according or policies. And according the process that we define. So let me move to the next question. Under your understanding what are the most challenging tasks you solve?

Interviewer: From my perspective. I think the the biggest problems we have is that we are kind of both in terms of mindset process and policies and rules set up for a world that we are no longer in. We used to be in a world where we sold appliances physical appliances deployable in one location and now we sell solutions that origin in one place and are omnipresent. And that just creates a lot of a lot of concern for everything we do. Whether that's comp or quoting our deployment or just governance everything that we're set up to do does not fit into this new world. I think that that's that's the biggest problem we have.

Interviewee: Okay. And we're obviously moving from the physical world to the cloud. The goal is help the client join the journey to the cloud. So therefore we are having different products that we used to have. So in this in the future with these new different products do you think that we are going to have the same sort of repetitive tasks?

Interviewer: No I think we're going to have very different tasks.

Interviewee: Now why do you think they won't be repetitive?

Interviewer: Well they might be repetitive but they're going to be maybe different repetitive. The fact of moving a license from one box to another box is irrelevant. There is no box. The whole concept around dealing with our rules and compensation based on where is the appliance deployed, that's irrelevant because there is no appliance and it's not deployed anywhere. It's everywhere. So these things are gonna be very different for us. So just dealing with the rules of engagement and these things are going to be very different for us and we're kind of not really ready for that. And then there is the whole question around. We used to deal with a distributor a reseller and then an end user. That's kind of how we operate. And we don't talk terms with the end users and that's going to change because we're going to sell more and more direct. So a lot is going to change and I think there's gonna be something in the new world that is repetitive. I'm just not exactly sure what it's going to be but it's gonna be different. I'm sure there are going to be things that are in common. I'm just not sure what they are yet.

Interviewee: Of course, it's very hard to foresee in the future and especially now that there are so many changes within the company. And this point leads me to the next question which is kind of related with this because under the current system because our current process how do you measure the effectiveness of your role and how do you measure the effectiveness of the people you control into sales operations department? how do you measure it?

Interviewer: Yeah. So obviously everybody has goals and their goals they are different. But at the beginning of the year and at the beginning of quarters I sit down with them with me directs them. They get a line of goals. So at the high level it's it's difficult to measure but like conceptually my job is to make it easy to do business internally and externally with the company. So if there are people sitting on their asses because they can't do things they're stuck. Then I have failed. If their customers partners resellers whatever they don't want to do business with us because it's too complicated because CPE Q was a cluster fuck or whatever it is, and they prefer to do business with somebody else than I have failed. So that's one.

The second is I need to make sure that people make good decisions. So when we have to grow the business 33 percent next year whatever the number is. Then you have to decide do we put another sales guy in Romania or do you put a channel person in Spain. How do you decide well you give people a platform for making a decision and that's where all the models and analysis come in. So. So that's two, and secondly, I mean we're an American company but doing business in Europe can be different. So I need to make sure that the company understands and builds an allowance for the things that we need locally. So when we fail and we deploy resources that I have a low productivity, well that's ineffectiveness from my side isn't only my fault? No it could have been the wrong guy but the right analysis. And just if you take that at a high level and just cascade that locally them in South there are so there are certain things, I measure all on but they relate to these three things. Does he enable households to make good decision? Is the business in southern Europe flowing? and do I understand the things that we need to do to be able to compete in France? But it's complicated. I mean if we're not doing well in France is that because of Ali? Not necessarily but Ali certainly has a portion of that cake on his plate.

Interviewee: OK now it's understood. I completely get it now. And what about efficiency? Do you think is the same way of measurement or do you have any other criteria?

Interviewer: No that becomes a little bit more subjective. And it's it's difficult to measure but I look at how people operate. I look at the task they are doing and that come across from the meeting we have the e-mails I see whatever it is. Are you doing? Are you dedicating your time to these three objectives or whatever objectives I have for you? If I see you're using way too much time on babysitting aims because they're lazy and they get you to do it then you're not efficient. And if I see you working 90 percent of your time towards to these three targets fine but maybe you're not doing it in the way you should be doing. Maybe you use too much time polishing your slides for the QB are instead of taking the things that really matter. So I kind of subjectively assess our people dedicating their time towards these three objectives and whether the activities they do really move the needle on they're nice to have. They're not sales guys I can't say you have a 10 million quota. You've done eight so you're inefficient. Exactly. It's just more subjective but that's kind of the principle of how it works.

Interviewee: Okay understood. And after defining how you measure both of effectiveness and efficiency, I would like to know how does the back-office performance in this boat affect the final customer perception of Palo Alto Networks?

Interviewer: Well there is a big linkage to that. I mean some of these people they talk to distributors they talk to customers because customers come to them when they have problems may they may be ordering a delivery or whatever it is. And their ability to prioritize these problems has a direct effect on the customer's perception of the company. At the same time if Ali is screaming, we need to be able to do business in euros because if not we can never be something in France. And that's kind of the voice of the field and I'm not listening to that and don't get something across them. Partners in France will transact with other entities direct impact. Just like that, many examples of our sales guys stuck with something and this customer screaming I need I need I need and you saying well these fuckers are in sales ops are dicking around I'm sorry I'm sorry I'm sorry direct impact on the customer. So yeah there was a lot of the activities that are very close to customers are directly involved with customers so big impact.

Interviewee: Okay. Yeah, definitely there is a huge impact because as you mentioned the customers are usually waiting for replies and these reply are they expect to be fast. We live in an era where customers are constantly online, looking for different alternatives and comparing different vendors and they are pretty much right now aware and they like to use the fast brute chasing method of just going to somewhere and have a fast brighter fast quote and a fast technical opinion. So if we enhance if we perform better we will definitely show this and this. I would like to conclude the the second part by one thought that will be that the back office is like the heroes that you don't see like were you that you mentioned in Lisbon. Is exactly what you just mentioned in Lisbon. So is the is the team is in the back of the stage wiring everything so the next the performance the next guy who's performing will just give 100 percent and close the deal or close the show. So therefore, on part 3, I would like to talk because you know how the team works you know everything about their needs or what they faced. So the batteries how the process could be? like what what the process could look like? So do you think that the information it's produced in the back office can help to create a better sales strategy?

Interviewer: Yes and it does in many cases and maybe on an individual level there are many people who said directly with the sales guy and this little and listen the install base of your customer looks like this. They haven't bought anything like this like this. Other customers have this if they do this. So yes. Not directly dictates customer strategy. So that is being done already.

At a higher level, we also look at patterns with other departments marketing planning whatever. And then we define sales strategy, so I think that takes place already and probably closer linked between back office on sales than I've seen in other companies so. Not unhappy with that.

Interviewee: Yeah. So in the future let's put it this way. Do you see more structured information like, Is the information that we produce right now is structured enough for you to have a clear sales strategy?

Interviewer: Structured, yes. But I think there is overflow. There's just so many things you can look at tax rates and growth rates and, on this thing, it's just becomes too much. I think we rather need alignment on what under two or three things we are looking at instead of looking at 200. I think that's creating confusion.

Interviewee: Understood. So what do you think are the perception of the sales ops or the back office. What do you think are the perception they have about repetitive tasks?

Interviewer: When you say they do you mean field people back office deal desk sales ops...

Interviewer: So I'm not seeing a lot of repetitive tasks that he has to do. I think they are fairly set up with that. I know they are there. They are looking to get out of the transactional stuff and be more than the advisors and partners.

Interviewee: And what percentage in their week do you think these repetitive tasks represent?

Interviewer: I think that depends where you're in deal desk with 100 if you're a sales ops manager I don't know 30 to 50 maybe you should talk to them about this.

Interviewee: I have an interview with them. I just want to know your opinion 30-70? Ç

Interviewer: No, 30 to 50 answer yes.

Interviewee: So now let's go to the next question. Right now, we are having a project as you mentioned the Costa Rica project where there are some tasks that we the people there will perform. So if you have more decision power over the organization. What else would you outsource? and why?

Interviewer: When there is a constant pressure here to increase productivity and now also profitability. So doing things that are repetitive and low. Intelligence so to say? Makes sense to do that in a cost-effective way. And I think across the entire organization you could look at everything from payroll to facilities management. There's just there's no limit to how many roles and tasks you could outsource. Just as long as it's done in a way that's that doesn't decrease the value of the service. So. I'd say sales ops is a good place to start. I think finance has huge potential. Why wouldn't tax it in Costa Rica. If you can find people with the right language skills just why would his sales opps sit there? I mean the sky's the limit except for people that are directly client facing or management. Think it's about finding the right balance. But in theory that can that can grow a lot. If you look at the large financial institutions in the US they've transitioned to thousands and thousands of workspaces into call centers both domestically and outside. There's just the need for physical such is decreasing in the virtual world.

Interviewee: Yes. Is that's correct. Definitely.

Interviewer: And one thing is outsourcing so another human will do it. But what do you think about the rule-based tasks? Because there are tasks that are not only repetitive, but they also follow a certain rule. So by changing the rules you change the task you always follow those rules. Would you automate these tasks? Why?

Interviewer: Yes. I feel that that's just a very cost effective and safe way to do it. I mean if there is a rule then a machine can apply it and there is just zero failure rate. If the rules are clear and just focused people on things that are at the receiving end saying the rules apply does ABC and now you can make the following decision. Yellow or red. Make the decision but then you have people that have more value in their jobs at least in my line of the business and you apply technology or it makes sense if you just scale automation employee satisfaction that just I have only positive things to say about that obviously needs to be done in a way that it works of course.

Interviewee: Yeah, I agree. And under all the tasks that you saw over all the years that you worked here in the sales back office process, what tasks are impossible to automate?

Interviewer: When it comes to a complex advisory task. And there becomes a political and strategic element to decisions and tasks then it becomes difficult. As a machine can look at data points and provide something objective, like a forecast, but a forecast is many things more than just looking at data points it also leads to what message do I want to send what's my personal motive. It's just that advisory function becomes very difficult. It's not that the president could be a machine.

Interviewee: Of course, understood. And this is just because for all those tasks some tasks you need human interaction so how complex do you think is the forecasting process in terms of human interaction and as we were mentioning these quality tasks.

Interviewer: In order to minimize the human touch you can have a machine getting closer so say something like Clari is a huge step in that direction that's basically automating with forecasts but just based on machine learning what the forecast should be. And it's kind of the direction we're taking in we can use that as a data point and then apply whatever strategy and motives we have on top or wherever we think we are smarter than the machine. It certainly has eliminated some of the hardcore number crunching behind it and I think the world is going in that direction.

Interviewee: Definitely. So let's imagine a scenario where these repetitive tasks that they are not cognitive the following rules are performed by robots not real robots but software robots so what tasks do you think the back office should do in that case?

Interviewer: Then they become business advisors they kind of diligence they feed the machine sort to say. As they asked questions the machine comes up with the answers and based on that the advice.

Interviewee: Yes, correct. and would these increase the effectiveness or their responses to the needs of the sales representative?

Interviewer: Yes, longer-term definitely. Short-term there is going to be a lot of governance in the machine yes? Because the machine needs speed up and learn. Longer term that's going to be a different task, because instead of a sales guy coming to an OP's guy and saying listen I need you to split the credit apply the discount or rolling into the right car that's all gonna be based on machines the machine is going to say discount yes discount no based on whatever policy and The sales guy is going to come and say listen I have this account can you help me strategize so put this software, this price to this person can we strategize around how to do that? are you coming to the meeting? and just becomes a different conversation. It's not, can you help me do the task, It's can you help me achieve the strategy.

Interviewee: Of course. So, in this world that we are imagining it right now, where you become as you mentioned an adviser and you give meaningful insights for the sales team for them to do meaningful job and release satisfied client needs. In this new process how would you increase the effectiveness of the consent process?

Interviewer: First of all there needs to be some governance around the machine. Whatever rules and decisions we make that needs to be fed to the machines that administrative function needs to be there. Every time we kind of we change our strategy maybe one market share maybe profitability all the machines have to be adjusted. So, that's going to be a governance function and I'll say it the rest is going to be advisory functions just customers of the machine being experts on output and translating that into business initiatives. can come with the title yourself n

Interviewee: I really like that definition and that was the last question.

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#### Kappa Interview

Interviewer: [00:00:04] Great so thank you very much for being part of this interview. So we're gonna start with the part one which is what is your role in the organization.

Interviewee: I'm in the strategic relation handling renewals for Western Europe which includes sub-Saharan Africa and the UK and part of Morocco.

Interviewer: [00:00:32] How would you define effectiveness in the sales organization.

Interviewee: I am trying to think. And I think when we are working together and also the system because we need each other. So there's some information that I cannot get on my own. So I have to liaise with them or days where I talk with deal desk. I have to liaise with the sales ops for the information so that I can gather and do what I need to do.

Interviewer: [00:01:08] Well what about the whole sales organization. Everyone that you work with. How do you define the effectiveness of that.

Interviewee: It is effective because without them then because we've got privileges in this SFDC and sometimes they've got more than us. So we need them within the organization because if they're not there then I wouldn't be able to get what I need to get to me to do my job and to make it easy.

Interviewer: [00:01:31] Okay so but what is the meaning of effectiveness in the back office. Is there any difference within the back office on the front office or the effectiveness concept is for both?

Interviewee: I think it's for both. It has to be because we need each other. So without them we cannot function without us. They can. They cannot function because they also need information so that we can make that whole process complete. So we need each other. Okay great.

Interviewer: [00:02:02] So we can move to the second part which is what tasks do you require frequently to the back office either in sales ops or deal reg.

Interviewee: Well what kind of task Assets if we are consolidating globally our require the whole excel sheet with all the assets globally also OPL I'll ask them also to find out what was booked last year so it can be able to make my focus deal desk we need them for extra discount. Somebody needs to approve we cannot approve it except that somebody needs to approve through the deal desk, deal desk when we are doing ELA. We have to liaise with them. So we also need them. Mm hmm. Sales ops. It's mostly documentation at the back. What about that governance that are governance? Also we need them a lot especially when there's sub ID. Like when there's a new account that has been created and it doesn't link properly they need to be informed so that they can link it for us. So you contact them. We have to contact them. Is it by email? It's by email. All of it. It's by email. So it's just an alias that we contact and then report also sends ops because also they need to liaise between data gov etc. They need to leave together so that it can be able to get sub I.D. so I can say that the most people that I contact deal desk, sales ops data governance and customer support if I need help with serial numbers. There was an RMA. We don't know exactly what happened. What was their replacement. I would contact them.

Interviewer: [00:03:45] Great. And are these repetitive tasks in the terms like each month. Do you have this similarly task or weekly maybe?

[00:03:57] You know weekly basis has probably contact them twice. I would say sales ops twice or thrice in a week data governance twice a month. It depends if the account set up properly because it's all up with the account. customer support for the admin. Probably once a week because there's always those remain that we don't know exactly what's happening. So to be once a week.

**Interviewer:** [00:04:21] Okay. Understood. So you already mentioned that you contact them on a weekly basis and the reasons why you did so. Do you get support any time of the day.

Interviewee: No.

Interviewer: [00:04:38] At any time of the day it would be sales ops you know because sometimes you work after hours right. Like extra hours or at night maybe. So you have to wait.

Interviewee: I have to wait for I send an email in the morning. Especially governance they will not respond when they wake up. So to be late you know customer support. Sometimes they do. Sometimes they're not. But on the weekend it's hard because I had an emergency on a Saturday and I had to wake up somebody in the US because as we know it is weekend. Yes. But does a governance. Definitely in the evening and sales ops because Oriana, they're here with Maria. We get it. If they're not we have to wait.

Interviewer: [00:05:22] Yes. So within this process as you remember what is the longest time that you waited maybe your request was sent, three to four days. OK. So when they reply to you after one day or three or four days is this reply effective. Is it everything that you need or you have to come back.

Interviewee: I need to go back again. Okay. I needed to go back again because it was something that was still not fixed. They thought that they did. And yeah I need to. And I had to do follow up because since it took long nobody responded and I had to do a follow up the next day somebody responded to where we came wanders and I had to do another follow up. So it took three to four days.

Interviewer: [00:06:13] Okay understood. And we were also talking about deal, data governance part and a whole day defined a strategy for renewables or for the wraps. So because you work with the sales team everyday do you think that the territories are defined according to sales representative capabilities.

Interviewee: I think so. Yeah, I think. Yeah, I think so.

Interviewer: [00:06:44] Do you think the quotas are well-defined.

Interviewee: How well defined then it's another story about the quotas, because a lot of things have been moved which affects our numbers. Also, the numbers if I say I was mixed globally because things they start moving when they move and that's what happens. So the content of the numbers it's something else. No it's not what it looks.

Interviewer: [00:07:11] Does it change. It changes all the time and that is confusing sometimes it's confusing and it creates a lot of issues. Yes and you need to contact them to fix the problem. So what do you think about the forecast process in your territory or in your theater.

Interviewee: It's hard to forecast. That is why I have to contact sales ops to get the statistics of last year what was processed on that because we do focus on a weekly basis. So I need to open the link of what was processed last year to this year. Taking into account we've gotta refresh so if whatever that was processed last year we did refresh. So I have to take it out. So my number goes down now. Exactly. It is yeah I need it but it is it accurate and what I have last year is accurate. Yes but for this year it's not.

Interviewer: [00:08:06] So the forecasting it gets problematic sometimes. Understood. So. Okay now moving away from the forecast part of the final customers perception. Let's talk about that. So. Do you think. And if you do hold does the back office performance affects the final customer procession of Palo Alto.

Interviewee: I can say probably 50 50 because sometimes they get frustrated and angry of our process is taking so long because the customer just wants an answer now. But I cannot give them an answer now especially when it has to do with data governance. Certainly, I have to wait but they don't want to understand that I have to contact HQ for them. They want that problem to be sorted now. When they send in an email. So their agency it's morbid it's quicker. They want it now compared to our return of the answer. After 48 hours.

Interviewer: [00:09:10] Exactly. And sometimes they get desperate because they have their real business case open.

Interviewee: So a real business case that is open and if it's open and Nobody's responding. They get frustrated that I mean we bought the equipment with you guys and you are not responding as quickly as we thought you would. But that's what we were promised.

Interviewer: [00:09:30] Ok. So it is actually it. Let's let's put it this way. You think the the customer perception change increase or decrease according to the performance of both back and front office. Great. So what requirements of tasks are important to secure a high effective response to the failed customer.

Interviewee: I think if we probably we have somebody in EMEA who can answer what the US can answer then the customer will be we will have a high customer satisfaction not that we've got low but especially with cases that we deal with and also letting the customer know that we're going to respond in a certain time not like keeping quiet. If we had that in EMEA then it would work.

Interviewer: [00:10:22] So what task do you think are important to secure these effective replays. What are the main task of the customer? would like. if we replay it on time we are ensuring a nice relationship with them,

Interviewee: There are many tasks like with cases of RMA, deployment of assets. Assets are not working properly. There's something wrong with the licenses and on.

Interviewer: [00:10:49] Okay. So it's basically about the licenses until they have a trial license. Yes they need to extend that because they want to buy the product but there is a month in between.

Interviewee: Yeah so who would they go to. So it becomes like who do we go to and then we open a ticket for them whereas if there's somebody who can just do it quickly for them, the it is easier.

Interviewer: [00:11:11] Yes. Yes do you have in mind right now. Another task because the license is indeed a problem. Do you have any other maybe tasks that maybe they are having problems with.

Interviewee: No. Because I think dealing with the end user that's what we are having currently. Those led the licenses and the customer because the reseller on our side is the one who handles the assets of the end customer. So when they get information, our information gets passed to the partner not to the end user, so the partner sometimes doesn't pass that and then they blame Palo Alto

Interviewer: [00:11:48] Yes of course because the partner at the end is the final contact but the name Palo Alto is in the equipment and in the service. And so the final customer thinks is Palo Alto. And sometimes is the partner.

Interviewee: It Is there the partner. And also when they're ANC they're the ones who know what's happening are amazed they know. I sense that exploration what the customer has how many devices what do they need. What was owned and what was ordered.

Interviewer: [00:12:18] What was delivered, what was sold, they know all, but do they pass that info to the end user. Probably 40 percent. The rest they don't. So most of the time I end up dealing with end user, just skip the middleman and go straight to the end user not exactly with the issue just to make their life easier.

Interviewer: [00:12:38] So there is maybe a problem of education of partners.

Interviewee: Correct. Yes I will say that but I think most they are but it's just probably a length of maybe they've got too many vendors which is they do they ever have they've been trained they have been trained but why they're not passing information is what we have to find out.

Interviewer: [00:13:01] Do you think it's hard for a partner to contact Palo Alto because of the processes.

[00:13:07] No, because they've got processes they can log in and they can see everything but I think some of them, they're lazy, because when we introduce the next wave they didn't go and read, they're asking us they're still asking us what they need the next week. Even though is relatively new it's there you can log in and read and see what's happening. This margins that needs to be passed to the disti is to pass them on. Also they're not reading. Nobody's reading so they want you to spoon feed them to top. You know what they need to do.



Interviewer: [00:13:35] What about the the the the people who is managing the partners. Are they taking any responsibility of the process?.

[00:13:42] They are taking responsibility, Because the Channel Manager we do contact them and tell them that this is so-and-so and so we always go to QBRs with the partners to find out where they are peddling and all that. all has been trained but it's just way where are they feeling. I don't know.

Interviewer: [00:13:56] Okay it's clear nice. So let's move on to the third part and that is basically the second part was what do you feel about the process now. There's the third level what what could be right. So when sales ops, when the back office implements a new process let's say the deal as management or whoever in the back office do they ask for your feedback.

[00:14:19] Sometimes they do. Yeah. They take guys in the group on our side. I don't know about the other sales department but on our side they talked with to people just to ask Okay let's do a trial. What do you think can we move this can we do that. Like with the CPQ they involved us they are they implemented it and they ask us what is it that you we can change to make it better for you. So every time we send in emails to tell them we do it in the group and then we send it to one person you ask who's the one who deals with the guys in the CPQ. Can we implement this can they do it for us by the end of the day.

Interviewer: [00:14:59] Great. Perfect. The other thing that this this process, Does this influence the effectiveness of the of the back office. And how how how does it influence it.

[00:15:21] It does. Because if they ask us what is it that they can do to improve. And do we tell them that you need to do this one, and then they improve it. I think the less of e-mails that go into sales ops they become lesser instead of more because they've done what we ask them to do to save us time off sending email and ask can you do this for me because I remember when Oriana was with us there are some rights that she had we didn't have in CPQ so every time we have to email her if I'm e-mailing the other five people who have emailed. So my email goes at the bottom. And she's looking at them. The answer obviously has not gone up. She's not going to answer straight away but she's answering also other people as if it is implemented within the system. I don't have to go to I can look it up myself and do it.

Interviewer: [00:16:09] Yes exactly. So I think that sometimes you've faced a rule based repetitive requirements like the requirement that follows a certain rule and a certain pattern. So do you feel well how do you feel about interacting with an automated system who understands this rule. Do you think it will help you do your job.

[00:16:38] I can see 50 50 because with the automated that knows I cannot give answers and says I cannot ask questions whereas if it's you I can come to you and ask you oh you got this how did you get it OK with this one what can we do. I can ask to go in-depth but with the automated it's just going to I'm going to click it's going to give me what I want but what if I want to ask Who do I ask then.

Interviewer: [00:17:05] What kind of questions are these questions change or are there repetitive question.

[00:17:10] They the questions they change it to it it differs for what exactly asking So the question. Definitely it's going to change but that is why I'm saying that with automated it just give you what if I want to ask something more and say OK since you responded I couldn't respond or I click OK this is what I get. Oh can I take this and use it some way. I cannot ask automated. So what do I do. Again I have to for the email and ask what do I do. So you know it's another chain. It takes longer.

Interviewer: [00:17:41] Yes definitely takes longer.

[00:17:42] So I would prefer to ask somebody than that automated that's gonna give me something.

Interviewer: [00:17:48] Yes. Correct. So what. What requirements do you think this system or a computer will not be able to perform or solve questions. What kind of. Yeah. Any question that you have any open question.

[00:18:04] Any open questions that you might have after receiving what you requested their automated system wouldn't answer me whatever that I ask. Let's say for example I'm just asking Oh can you check this serial number was RMA, and then does this automated system say yes it was Ami. What about the replacement. Who am I asking. Whereas if I ask a person is gonna say Oh let me check for you. So with the system I have to say OK it just gave me an RMA. What about the replacement. And who receive the other RMA. Like there's so many things that you do not know.

Interviewer: [00:18:41] About this ARM when you ask the second question and you go to the Oriana for example when you go does she make any cognitive work or she just go and enter to a certain system. so it's the same tasks she is performing.

[00:18:59] It's kind of like the same tasks that she's performing and then she looks into it cause probably I don't have like in the system like let's say the RMA. We do have some system where you can check but then and then when you go back it gives you replacement or RMA and replacement. And when you check it there's nothing we don't know what to do. So we have to email IED and ask the Guys, can you explain to me what happened because it looks like the customer didn't receive it. So obviously you I have to now go somewhere else.

Interviewer: [00:19:29] Yes of course. And when you contact somewhere else or different. Different teams and departments will get the same reply. When you receive this reply. Do you receive any extra like information or a need there. Do they have to interpret date your question.

[00:19:46] They do you will receive extra that you don't come back and ask. So they will explain everything that this is what had happened. The problem was here. This happened. We moved this to do this do that. So at least you don't have to go back and ask what we do now.

Interviewer: [00:20:04] Okay. And are those problems repetitive or each problem is different. Each week.

[00:20:10] Each problem is different, It's always making about the RMA but every week it's a different problem. The ones that they come and you know that you dealt with it you don't have to email because you know the situation but it's different problems every day.

Interviewer: [00:20:24] Yes in fact. So what what process or task would you change to increase this to increase the effectiveness of the sales process. Because you can also increase right the effectiveness We have new targets to achieve now in the next three years and so on. So under your experience what processes or task would you change.

[00:20:53] I think for the system to work properly and provide proper information for you know would not have to go back. When you sending emails to get the respond within 24 hours that would be good for us. Also the communication within all of us within the organization that that one needs to be improved because sometimes there's no communication whatsoever. Like it's like you're working on your own . So that that will really help. And also whatever information that was gathered that you ask it to be visible for us that this is what has happened so you don't have to go back and ask it will be data systems or whatever it is you're asking. They're fixing the problem. Ask them to put it where everybody can see that they don't have to go back and ask.

Interviewer: [00:21:50] Ok. So like examples. Right. Because somebody else already had that. Yeah.

[00:21:56] So probably you might have something like that and then you go back and check.

[00:21:59] So he's learning by experience. OK. So with this when you learn by experience you are. Is it possible that we could say that some task in the past May repeat in the future so we can learn from the past to forecast our new weak points yet this way that way. Okay great. So you know in a perfect situation what kind of insight and information the back office will help you enhance customer relationship. So let's say that you are the owner of the whole process right and this is a perfect world where everything that you ask is granted. So. what is the information that you will need to make your work easier and close the deal or in case a customer better.

[00:22:51] There is Loads of info. I think putting. everything. Probably having a list of issues and answers so have probably a system whereby I can go and check on the issues that people had and what was the answer for that to work efficient instead of all these emails going back and forth going back and forth because we are growing there's more problems arising that is I am saying sometimes you will have the same problem but sometimes it's different. But how to take on it. It can be the same as the other one. So for me that we've got something like that that I can go in and just check and say OK this has happens before then I don't have to e-mail anybody.

[00:23:35] Exactly.

[00:23:36] And then it's easier for me just to give an answer than waiting for 24 48 hours after selling

Interviewer: [00:23:43] Yeah that's true. And what are the actual tasks for example that you will tackle with this do you have. We were talking about deal rage maybe or some other. Well what are the tasks that right now are are impacting your performance.

[00:24:03] It will be systems currently CPQ is not working. So I cannot work because I need to use CPQ to so currently is not working. It will be deal desk I have to wait for somebody to approve. If there's an extra discount sales op I have to wait for somebody to provide files for all the assets. If I'm looking for one that I've done it would be accounts not set up. I have to wait for somebody to set up that account properly. So there's loads of cleaning up that needs to be done within a set SFDC which is not done. Which is impacting us and our SLA becomes longer compared to a short period of time due to I have to wait for somebody to clean up the sfdc form.

Interviewer: [00:24:53] Yeah exactly. And whenever you receive this does for example let's go to the deal rate when you're asking for a higher discount for any any kind of purpose. Because you're asking them to close a deal. Right. You don't ask it because you want to wake up in the morning, they'll get what you really have a business case behind it. So whenever you do it that does. Do they ever reject that.

[00:25:16] No. Because you have to put a justification. You cannot just request them. You have to put a justification of why on my case they've never rejected because I always put the case back there's always been a delay of somebody to approve because there's different people who needs to approve. And it depends which how much is your deal and how much discount. So it goes to different people. Some they don't see the e-mail that gets them that they need to approve so and again everything delay I have to e-mail one by one C.C. everybody guys I've just send in the approval for discount. Can somebody please prove it because if they don't approve it, the order doesn't get booked.

Interviewer: [00:25:55] But do you think this delay delays because they are also getting a lot of e-mail from different teams. And different requests or they need to analyze each one of them is just centralizing one person. Right. So this person sometimes gets swarmed by emails. Do you think that's the reason?

[00:26:11] I think that's a reason because with sales ops and deal desk they are, four of them, they are covering different regions. So West then East. South and the central. So each and every one of them they are for specific but still they've got also other tasks that I'm working on. So probably they do the email thing of going the Fed not the first come first serve at the first requestor instead of you've just put in an e-mail they jump in and go up and respond to you know I think they've got also other things that they're working on. So that is why for me as soon as I send that discount, I e-mailed that person and I just said Can you please approve it.

Interviewer: [00:26:54] Yeah definitely. And all the tasks that we mention right now are reactive tasks like you send something and they're are things we don't yet. So what tasks do you think that are proactive that may help you. I'm talking about maybe if they send you the specific type of information that will enhance your review of the customer may be or what do you have so in the puzzle. Do you do you have any vision of the like what would what would you expect. Because if we are managing right now we are changing. This is sells ops so so business intelligence. is there any information proactively that this does the Department consent to you and you will and you will take that information and make your role better your performance Better?

[00:27:49] Like for me currently if I can have an excel sheet with all the assets of Western which is what I'm covering with potential for refresh. Something else that will make it easier just an Excel sheet. Customers name all the assets that they have potentially. This is for refresh. This has been refreshed. Remove this remove that then it be easier.

Interviewer: [00:28:11] Yeah. Would you like that for a week and a weekly basis monthly.

[00:28:15] In a monthly basis because of a clean no on a monthly basis. That would be great. And also tableau it's not clean because we're still getting stuff that it's laps which is it was supposed to be removed. When do they clean it. I don't know. But I've already spoken to Oriana about it and she did email because she C.C. me she e-mailed USA that they must take them off but glad to receive email that I've got one point to laps which is I don't have because all has gone to refresh or some they have been deploying so I've got half of that amount. So our system also it's not making my life easy because, Kristen looks into it and think oh there is 1.2 M thing so she can still renew.

Interviewer: [00:29:00] So people in their management are trusting. This number of numbers whereas the numbers are not correct.

[00:29:06] Yeah. And part of your job is cleaning that and explaining yourself why the number under way is and actually in the reality you don't have them.

Interviewer: [00:29:15] I don't have them and I have to relate to to somebody to clean it for me in the system but it's not being done. I know that they've already escalated it. But in the system it's not being done. If every month I keep on getting the same e-mail from my manager senior but it's there and I'm like Yeah but I'm waiting for them to clean the. Oh yea we see but it's they do something about it.

So it's it's time consuming and it's also maybe impacting the perception that your manager has all your role. Yeah right. So that will be if we have a proactive role it's also to have a proactive role of them cleaning or making sure that you get the correct number and you will ensure a better performance. If you perform better And you are more effective in your daily task. You also show effectiveness to the end customer. So do you think that there is a clear line of thought that if you increase the effectiveness of the sales ops you can therefore increase the effectiveness of the front office. Moreover, it will change the perception of Palo Alto.

I think so, some of things we have to do it ourselves, because we know our systems are not correct, just to let know the end customer let know, because at the end of the day we see a different picture. Our systems is making my life difficult, because it is not set correctly, my work is difficult, I am making justifications.

Interviewer: You are doing both justifications, one to the sales managers and the second is the end customer Some of them they do not understand what are we waiting for?

Great part of your day is explaining, a lot of explanation, sensitive email, not exploding due pressure

70% of my job is Adm which can be eliminated if we have a system running properly, most of my time is Adm going back and forwards same email, that is what taking my time,

if we would be able to help you, not 70% or 30%, how would you use the extra time that you have,

I can do so much with this extra time, I can chance, call the customer, more time for different task. Schedule conference calls, with the account manager, go and see partners. At the moment I can't because of the adm that i am doing, even when I travel and see customer, I still have to work, I still do Adm I have to come back to the system and check everything. Do all the process it because difficult.

Interviewer: You will also have more time to have meetings with patterns and educated them, so they will solve the problem before it gets to you.

No email with the partner because I already gave them everything, they and how to solve this and what to do, they would no by any email,

Interviewer: Would you have more time for cognitive work?

I have to go back email from customer because i couldn't give response. The ultimate customer is the main stakeholder, the are the ones renewing the account, to make better decision to what to buy in the future, your task would be to inform them about our new products. Like panorama. Promoting the new products.

Interviewer: Do you agree with that idea?

100%. For me if the Adm is gone, i would work efficiently and effectively, the fact that I would give the answer not a fast answer. Visiting partners and let them know about panorama with all the referents it becomes easy. You can send the same email, "are you renewing" no we are not, the system still looks like to be renewed. I would have more time to explain, I need time for myself.

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#### Alpha Interview

Interviewer: OK. So thank you very much for. Having some minutes with me. And I would like to start with a part one which is the introduction. So my question would be , what is your role in the organization and for how many years.

Interviewee: So I am working now in July 6 years for Palo Alto Networks an organization of sales operations worldwide started with their headquarters in EMEA building the sales operation and bringing this to the different level that we started. And for the last three years joining the deal of desk to again bring into deal two different levels. And that's nothing to do even with my capabilities but with the growth of the company. Right. So we started with basically hundred people six years ago where it was one person for service operation doing everything right from logistic to compliance to preparing the orders for booking pipeline management and forecasting everything done by one person and later by second person. So it's very different stages. The company went through of growth and streamlining the process.

Interviewer: Yes. Yes definitely. Because you had so many years working with the company and you know pretty much as you mentioned how the company grew so you know that there are the front sales office which are the sales representative and then we have the back office of the sales so the guys who are pretty much wiring in the process and making sure that we follow all the company's policies. So under the under these knowledge that you have. How would you define effectiveness in the back office of the sales organization?

Interviewee: so I would say it, Palo Alto to have extremely developed effectiveness even with very limited resources. I have been working in a company previously with I was a manager of sales operations where there was I was for example managing 27 sales admin people to help sales people right. So the front office and the back office the ratio was very different. It has to do also with the fact that our Palo Alto expected I was a drive, and this was because it was startup to enable and it was one of the few at this time having a couples being sell. So not just sales rep but every sales rep had an EE so they were enabled from the technical point of view and the seller's point of view and they were not having big office because they were thought we going to teach you everything and you're self-sufficient. So this is how it started. So sales were expected to do a lot of things themselves. A lot of organization doesn't. Right. So sales ops effectiveness or back office effectiveness can be set in half. We were very effective because we train sales to do a lot of sales admin themselves this that to moving a little bit more away because he'd become bigger and bigger. The targets were growing cried so our appetite for revenue and we were growing who wanted to note we were growing some days and growing expectations with very high speed and it would be not possible to keep the same expectation from the sales. So this is where the sales operations slash back office right. Because so also have so many so many you could say it's supporting teams and not always supporting right. I mean not in the best sense but if there is a commission team or data governance it is basically an back office slash administration and not really supporting a sales is after sales. So then when it starts to be defining into our direction what we need and this start to grow on it is also trends in the market. It's a trend in the market redefining what's more important. And also if this is an commercial private company, or is it public that's make a big difference in what sells operation is driven by. So as you can probably noticed sales operation here and even more than in other regions or theaters is very focus of analytics for analytics BI. And that is due to the fact that the focus and focus accuracy is extremely important being public company right. So this is what a lot of resources are going. Is this resource helping necessarily sales in the long run or in the from the helicopter view? Right. If we're very effective on forecasting well our share is going to be well we can plan it right. And that is very different aspect of what seles operation is doing. But in the same time what in my opinion Palo Alto is lacking and is still lacking is administrative support for sales to help them.

Interviewer: Yeah you touched so many points that I was actually going to ask later. But it's so good because I think that you already understand what where I'm going to. So the next question would be is there any difference between the definition of effectiveness in the back office and in the whole sales organization. Or is the same definition.

Interviewee: Well I think it is an issue for a lot of companies right. One is a huge growth expected their company going to invest in sales. So for the revenue generation quota carriers rather than spending all we are costs however we want to see that's right.

Interviewer: Everything is cost except marketing and research and development.

Interviewee: Exactly.

Interviewee: So you know for us it is and this is how a company grew right, they were not investing too much in that which in the end require very effective people thinking this places because we would have to find effective but also have the mentality in being able to walk on fast growing environment. Not everybody can handle that, it is a high-tension high pressure because

it's a lot of overworked and task and fast moving. So effectiveness it takes people right. It takes specific kind of people to be able to be effective in such a fast-growing organization which is investing in sales.

Interviewer: True. Yeah, I agree with that. So let's move to the second part which is I'm going to ask some questions about the process as-is, so the current process and how do you feel about that and what are your concepts. So what repetitive task or request do you. or the back-office face regulatory.

Interviewee: I think you probably have already seen in the inbox right if you will be seeing but I think that is a lot and I think it will be ongoing account reassignments right. People are. There is attrition. People are rotating right. And especially in the fast-growing environment. This has to be aligned with the target and which is given is being carried by the appropriate people and opportunity which they are being assigned to them going to be reflecting in a Commission statement. So everything has a faces. And I think that at a repetitive request will be account reassignments opportunity reassignment commission splits. Right. And this is very sensitive subject. So this is the area. What sales operation will be touching a lot. Right. Because I'm now in the deal this time not dealing with that anymore. But I would suppose this is a lot of questions and then you have after sales questions. Something went wrong right. Grace period but it is not. It should be extended. He's not showing us extended serial numbers and not showing what it should be showing. So it's a lot of. I would say it is sales desk questions customer service internally. Right. So I would think that will be the issue from the other sense. There will be probably a lot of requests which you might be getting for reporting information. Right. Because now your team or Eva team is streamlining more to give business analytics. So there might be a lot of questions in this area.

Interviewee: What about deal disks

Interviewee: did it in building this cloud deal does we have wanted to but the question is can we have that discount. Can we get these dollars right on this target price for this specific deal. So our ongoing question is to package deals anything which they selling has to go through our fingers and in this business we have a high competition. We are being a Bentley of firewalls so Bentley of network security so we are not the cheapest. We are the most expensive in the market. So in order to be in this competitive market the guys who have the targets and they know what they are dealing with they cannot sell it. Understand the discounts if they are going above specific requests you know specific potential indication of the discount they have to come to us and that is packaging that is proposal that is tenders that is contracts rights of pricing agreements enterprise agreements anything have to go through us and this is in our area is very repeating. It is not that many different in sales operations. If he's broke because now it's become to be streamlined That's right. You have Savraz with s desk so he will be taking some of the after sales. That is a MAM support wasn't before right and they will be taking some of the typical sales support admin right. And then is it business analytics which you probably also define between each other of this channel define its channel operation or anything with the partner revenues or targeting and then you have a planning concept meditation when you have Joost. So now things start getting a could say it's specialization or expertise right. So we didn't have that before. So it was kept by one inbox because it was just not enough headcounts.

Interviewer: Correct. Yeah yeah. And that leads me actually to the next question because after you describe how it is the question will be how effective the management of the requirements over all these aliases over is all this inbox.

Interviewee: What do you think. Well I think it is difficult task for growing company and I think with sales operations especially in EMEA what you're doing is great because aligning we start is a little bit before to have at least grouping the potential task to where it could go. So when somebody come new that can follow the process. But this is constantly changing. Then your teams are being introduced right. And this specialization of being introduced so I think a certain point it should be more obvious right. It can should not become all in one box because as you probably notice somethings just should go probably directly to the data governance are going directly to the compensation team or going directly to I don't know business analytics team right. If this is heated by Eva or someone else is just that if we're going to create that. Is this good in the long run. I don't know about in such a growing company what it would become a corporate. It cannot be one inbox holding hundreds of email and somebody is being you know traffic coordinator. It doesn't make sense. It just gonna by accident end up in the wrong inbox. They can forward it for this. That's a little bit more difficult because we have you could say it's not that many functionalities and more repeating. So what I have done we divided the same functionalities per region within EMEA.

Interviewer: Understood. And do you think the management of these aliases influence the effectiveness of the whole sales organization sets up some of those older sales organization including sales representative.

Interviewee: Well I'm I was hearing a lot of complaints when the things start to change. Right. Because they used to and this is just one thing is being used to having easy way to just dump everything to one inbox. So that's what sales likes in the sense of effectiveness. I think it would be better to have this separate area for specific issues. But we have to be sure that the right approach is being done right. Because we see that all this kind of ticket ticketing this was the new trend. So signing a ticket the following on it is not always working. People get lost in all that you know I don't know how if there is any way of adding priority in it right. Because you've become so distant from the specific case and people who handle this the centers cannot see the urgency of things that I wouldn't know. That's always the right approach. I think rather to have and team of specialists right and then especially doesn't has to be extremely high educated people just people who really are good in the field and now understand that there's actually commissions but is sensitive but urgent. Right. Dumping them in some inbox would given the tickets it would be a very unpleasant feeling for sales rep who is bring in millions. Yeah. Right. So it all has to be treated with the right approach. So if this is commission if this is data governance right now the data governance from the other sense it is important maybe not the top priority but in the same time it would have impact on our pipeline forecasting right. So it all has to be talked over and the well's structure. Some things can work as a ticketing. And I think for example sales desk after sales where we need to exchange, I don't know some SKU which was sold incorrectly. Maybe this is not the first urgency you know

so it is many ways and I don't I found the right people to evaluate each of this. But definitely having a marking of what is urgent. I have this team's prepared for that is going to make a difference.

Interviewer: Yeah I agree with it definitely on this concept that you just mentioned about the ticketing process and how you match the priorities of each requirement. It makes me think about the next question because sometimes people just have a reaction over that requirement but whereas some other people are more proactive over it and they can just say Okay this may happen or this because they are kind of making time in their schedule. No there they will be busy. So do you have a proactive or reactive role

Interviewer: Both.

Interviewer: And how are these proactive tasks that you have, are they structure.

Interviewee: Well so I think in its fast-growing environment you must have both right. So first you're reactive because there is a requirement that inquiries is coming. You have to react to them proactive seeing what's happening right? It's going to give you the possibility to proactively streamline some things improve processes which in the end it will improve they're their reactivity. Right. So I think it is important to have it both. And each of my team should be doing that.

Interviewer: And there are these that the proactive ones do follow up on a structure or like anyone is free to be proactive wherever they.

Interviewee: No it has to be structured. It has to be sorted in our business we have to be structure then we have to be aligned right. We cannot say it. Of course. We can't control everybody's moves and they're going to be case by case situations but in the end of today we have to set policies right.

Interviewee: We'll have to set the thresholds. This is approximate to discussing what is the max of giving to discuss specific model. If we gonna let it unfold I said OK. Act proactively then in the south Europe there will be different this comes then it will be in Middle East. Right. And that's not the idea because this would be going to be. Influencing the market. And this means our partners. Right so there is a reason. Why. And we should be proactive. The ideas is always welcome but we have to be aligned.

Interviewer: that it makes the whole sense because as you mentioned when you change a price in a different territory or country it affects directly the whole market because the markets are now super globalized, so they are dependent on each other. And therefore, under your understanding I think that you already mentioned. I'm maybe looking for the same answer. Do you think all these requirements that you receive for example for discount or for having the equipment the splits of the counter so on? Do they follow a certain pattern.? Do you think so you?

Interviewee: mean pattern. That we can notice the requests coming. Why. And that is pattern and if people will act in a specific way. That's what I mean.

Interviewer: Yeah. I also very active a certain pattern like you can see if you already work with someone for a lot of years so you already know how this person works what are they going to ask. Because they follow a certain pattern like the markets or the territories or.

Interviewee: Yeah, I mean that is many patterns right and I see some patterns which good patterns is. Right. Doesn't matter as Where do you see that's OK. Somebody who is looking at market IT market and , you could say, the experience salesperson the partner which I would be getting would be something which I like. Right. Because I see this person is going to challenge me and I'm going to challenge him and I can get a lot of information so I can get that the sheets of how the competition is going this person is one challenge I expect different from our company. Why don't we change our products or solutions? Right. So there will be this patterns and this is patterns which is welcome but there's also patterns which are coming from less or maybe more junior sales people because we're dealing 90% percent with sales right where there is either lack of guidelines from their managers or simply Oh I'm not developing in the market I'm not interested in the market where they simply want to have discounts and they don't think they need to justify it doesn't work like this, or the patterns of trying to abuse some situations. Right. And that's unpleasant patterns. And then you're going to have typical patterns of regions right. So emerging market is a good example. One or many very rich countries but is a very big. You could say it expectation and pattern already established that they have the highest discounts in the company. Saudi Arabia Qatar all these places. Why, there is an specific way of selling there, specific approach to the market. Right. They are expecting that the lowest pricing because they are getting the lowest pricing at this market. Everyone wants to have the biggest Qatar Petroleum Company in their portfolios. Right. So it is specific parties which are also something you're not surprised. They're also be partners in the non-developed countries they simply can't afford. Yeah right. And there is competition who can compete and give the better prices. Do we want to lose it or do we still want to be there? So there will be patterns of the region patterns of the economic situation right. If Turkey was closing on exchange a year ago. Right. This is also partly to be expected and it's going to continue. So it's many different factors.

Interviewer: But because you received so many requests for so different places as you mention emerging and west and south so you can tell the patterns easier because somebody who doesn't have the information that you have wouldn't be able to have these pattern view. So the information that you produce is key in order to recognize these.

Interviewee: So I get this because you're going to identify protest in order to be able to automatize right not only to automatize but if you really think about it recognizing patterns.

Interviewer: When you want to translate them because there are two ways to translate but one is the computer way which yes not do or don't do. But the other way is the cognitive human way of really seeing behind the number. And I believe that if we are automatizing some administrative task you will have more time to recognize these patterns that are very hard for a computer to do. So we will go deeper on that in the next part anyway. Under your understanding what are the most challenging task that you solve.

Interviewee: I think for us and you know a lot of times were in. I mean a certain situation we are in deal desk this right? I'm talking for deal desk and not for sales operations we have to deal with sales and finance. So obviously sales have their objective and as much you know the TVP or you know the head of sales have to take into consideration that our revenue have to be profitable they are set on targets they have to achieve special target that's their objective. That's their job. This is what they are being paid for. Now finance have totally different objective. They have to just of course we want to reach that we all want the whole company one that is the target but have they have to make sure they will make profit enough profit to be able to increase headcounts cover the cost cover the facility cost logistics you know stocking anything. So this is something which sales not always think about is where to find us. That's why we have all these organizations which are important. Now I'm with the deal this in between. So we are authorized you could say to make a decision what we should do in a critical situation, if there is 10 million dollar deal where we want to have it in our portfolio but is just not it's going totally below the threshold we want it. So we have margin and the discounts and all that. And it's just not not fitting anymore. All right. We'll still making profit but is not defeating the expectation of finance. This is the difficult part what we have to manage. So we have to listen very carefully both sides sales. Right. And then be objective enough to understand it's not about helping this one guy right or support District Director. It's also not always to satisfy what Christian wants you have to make an objective decision and advice. And that's sometimes very difficult because it has many aspects and oldest people which are involved, they sometimes not that involved in the specific case that has gone out of you is had no yes or no. So there's gonna be a lot of time for finance. They have to just look at the pure dry numbers. He has now. All right. Christian, I want to see a business aspect of it. Strategic points right. Why what. What is next what is a get-well plan in the end. Our team have to give an independent advice. Yes. And that's difficult.

Interviewer: Yes because you are as you say in the middle of two different organizations who have not different goals but they want to achieve the same goal in a different way. And therefore, I think that maybe what you're. I don't know. Correct me if I'm wrong, you have almost like a political role because you are the intermediary between these two big stakeholders who are very strong in their positions so you have to advice on not given more to the owner but be fair for the health of the organization. So that's. Is that correct. Yes. Great. So because these roles has you explained so well so so diverse and at the same time you need a lot of human interaction to know Who are you dealing with and why are the reasons behind the requirements. How do you measure the effectiveness of your role.

Interviewee: Well I would say that the effectiveness is to be able to support closure of the deals which are being in the pipeline right. Because in the end of the day this pipeline has to be in a certain point. As you know the best case of committed s you know reflected to the forecast so support to business, we are there to support the business. But without compromising profitability. Right. How do I measure this a measure of this rather that we propose that we not lose the deals. So everything is being done properly and both parties are happy. A lot of time I would be still and that's just me. Supporting the business rather the profitability knowing that business model of profitability. So you know this is a little bit of content working at different companies is different aspect. How much profit in order to grow a company defines as a model? Palo Alto have very good business model. So knowing that I would measure my effectiveness of helping to close the deals as predicted.

Interviewee: of course, it makes a lot of sense. And as you mentioned because there is a difference between private companies and public that they wanted to put the shareholder out there, so they need to also take care of that and they. And what about efficiency.

Interviewee: I think we are at the point that we can't be any more efficient. It is just. Well we we kind of tried to and this was the goal to be able to respond to all the requests within 24 hours that it became a certain point impossible it is just impossible because we are getting into more complex market. We grew we were starting with the average sales cycle of one quarter and deal size of I don't know 150 k we are coming to really couple of hundreds of average right that would deal desk is touching in the same time we are proving approximately 8000 CPQ per quarter. So efficiency I think we're pretty high. Can it be higher. It could. If we have more people yeah.

Interviewer: Yes. And you measure according the amount of CPQ use as you mentioned in the I would say 24 hours reply.

Interviewee: I would say it's more of what is in in our inbox that we're not stretched longer than two days. That is difficult is very difficult to measure. Because. It's good that you're saying this because maybe sometimes we would have to go there right, and there is people who are going to come into a central point into the picture. Want to know how effective is deal desk and the effectiveness can only be measured by us talking with sales. Right. Are you getting the support quit enough? Are we being slow closing your deal? I because of the deal desk. Because that's the actual real measure of effectiveness right. If I gonna say

I'm approving I don't know 20 quotes a minute doesn't say nothing. It could be a lot of quotes from inside sales which they just you know create something then maybe correct 20 of them. So I think effectiveness is on actual closure of a deals, the ones that we schedule or we just came to the deal desk, how this can be measured. Difficult because this mean we would have to have really. And joined of all inbox. and seeing and having a turnaround of every inquiry but not to write out an answer but actually response. And find out who brings the steel to closure.

Interviewer That's a difficult is indeed difficult and that's why they're the. There has to be a discussion of how this has to be measured and definitely is going to involve a lot of people who have a lot of different views over this definition of effectiveness in each team within the back office. So we're ready to go. how. This could be measure and your understanding of it. How does the back office performance affects the customer perception of Palo Alto.

Interviewee I think it is a huge aspect of our strength right. Anyway, it used to be I don't know if this is changing but we grew, and we won't. Just what I liked it so much in Palo Alto when I came here that customer was very important, and we build on that right. We build on the keeping customer exceptionally satisfied. So if there will be unexpected changes whatever it would be. Things are changing. It's always gonna start to be changing. The cooperation is so satisfying client without compromising our revenue recognition. That's something very special and that's what we were doing for a very long time I was still trying to do we recognize revenue. So we do not accept credit. Right.

That's that's special because we do not take credit. We do make the clients satisfied. And that's also involving deal desk. So we know for example to what client, we sold something. We have a policy no credit. Why. Because we recognize the revenue already. This comes to us. It's gonna be customer satisfaction issue right. We're going to make sure that the next order, we're going to give them potentially special discounts. Are we going to face them in a different way. So customer satisfaction and still now even though we probably pushing a bit more we still know this huge board who is not moving, we still can make compromises. We still can work with product management and I was involved in many cases where we have a huge client who want to have a specific product integrated into our solution or solution which is still on the roadmap. Just because competition is already offering this product, we won't be able to turn things around. But I have never seen the different companies. Right. So being able to establish special integration of the solution within the special product, if it was launching for example traps what society was launching into a frantic it's the cortex we would be able to offer to our lot clients special things, that is not happening in different companies that often involve so many groups. We are still in the short lines in the communication we go work with the head of product management if he said OK I'm going to make it work, it is tough to attract, right, this is all which we can do it is doable it doesn't mean the companies always do it. So this again customer satisfaction. So we are still able to do that and I think this is something which we should be very proud of still.

Interviewer Yeah for sure. Well anyway what. Whatever task is enhanced in the back office is definitely influence how the face of Palo Alto looks like at the end of the day.

Interviewee You know I mean it's impressive for many ways right. If you call it back office some people said no it's nothing to do with a back office because it's a product management would do this. We are part of back office right. So everything which is not sales is back office. And if we were able to surface all the special requirements. Right. And we keep on doing this would keep on developing. We felt it was still a very young company right. We just introduced enterprise agreements two years ago. We introduced VM products and enterprise agreements with developing the enterprise agreement in the cloud. And this is kept on going. And this is also customer satisfaction right. It is just cooperation between product management and R&D but also I.T., process streaming, and everything it's ordered, the CPQ tool, which is there, we'll be enabling them to sell easy and satisfy. This is based on feedback from the clients. All this improve that we are continuously doing right. So in my opinion we are very high in that aspect, is fast enough. I don't know.

Interviewer Understood. And it's a really nice concept that you mentioned how the front office will understand and detect the true needs of the customer. And he will have to go back and translate that need into our language so we can just move the commercial technical bar to meet the exact requirement. So and that's given that that's the key for me to go to the next part which is the process to be so. How would the process be to achieve basically these that is the model of the most important aspects of the back office. So how does the information that you produce. It would be used to create a better strategy. How do you see it.

Interviewee Well I think we're getting so much feedback right. And this is feedback on many levels. This is feedback why are we here compensation plans are not working because the sales reps are being stimulated to sell specific product, feedback when the commission is not being calculated right. The rules of engagement were sales was driving potentially. The project is about to finish, why shouldn't they share it. Right. So, we're getting so many feedbacks which impact their fulfillment or satisfaction being sales. And it's also important for us because there is it works both way but also feedback. Which help us to be going forward not typically sales operations issue but going further right to go into the product management going to the designing going to do, to legal you know many different ways of selling ways of making transactions.

If we want to maybe exclude two teams and now we introducing SAS model of selling right so selling. So this is also based of feedback and not only of feedback, but also observing the market.

Interviewer Exactly. Recognizing some patterns that you see from a different view than any other role would in this. In this case where you were and where we are obviously everyday working to encase the process to make it better. Do you see yourself doing repetitive tasks?



Interviewee Definitive.

Interviewer What percentage of them represents in your week you know we.

Interviewee Well I think it is also depending. I would say one of my team member members probably would have slightly righter because if they're holding one region there would probably have more than in my case because I still have a little bit more variety, dealing with the team and dealing with other issues. But if I would look like a typical deal this member. There will be 30 to 40 percent. Can this be replaced by automatization? I don't know, because every time we have to hear the case the cases which are coming to us repetitive in the sense of. Changing the discounts applying to discounts. But then again, every time is different bill of material.

Interviewer Of course. I mean read it repetitive does in doesn't mean that is the same repetitive is that the name of the task. The same. Yeah but the outcome of the process itself may change. So yeah I think that we both agree on that point and it is very useful that you mention that because then the next question would be if you had the. If you have like power over the organization over the whole back office organization what process would you outsource?

Interviewee In the whole back office, Well I think the outsourcing part definitely could be commission part, compensation part, right and not strategic. So planning it but proceeding on it. This is something that shows when the good system is being pre taught planning is being impact that this can just be going forward with someone who is doing repetitive task right. Order processing. Order fulfillment, IT, System Improvement. A lot of these things can be outsourced into end of the day. A lot of things in the company can be outsourced. Is it always good? I don't know. I think the main task which are involving connection with the strategy and the decision makers should be always made in the company. But there will be a lot of really highly repetitive tasks which can be outsourced. Definitely.

Interviewer If you had because you have a clear overview of all the processes that we follow. Yes and you know which are repetitive and which are not which are special cases and which are not but you also know that there are some tasks that follow a certain rule and if the rule change the task changed and so on. So the rule is the one who is managing and giving governance to the whole organization. So would you automate these really tasks to create the rules. No the rules are created by humans according to your strategy but the tasks are always the same are repetitive but moreover they follow the rules always. Would you automate those tasks.?

Interviewee Yes.

Interviewer Okay and why.

Interviewee I think it would bring the. Efficiency right. And we need it in fast growing company with a high expectation of sales. So, to quota carriers, we will have to give them effectiveness of proceeding. I'm hearing daily the frustration about not account being assignment, or restraints, or accounts are not set properly in our system. Right. A lot of things which we are dealing with. We can't even work because the system did not apply the rules properly. Then you hear that a lot of times commissions not being paid properly. It is actually a system right. Who should be taking the rules which are being created in the beginning of the year and just applied? Just something sometimes can go wrong. So this should be a review you know out of you a managing. Oh you know still. Very sensitive human aspect to it. A lot of things in this sense can be outsourced.

Interviewer Yes definitely. Which are impossible to automate. Would you say. Which is it does it. You will say this is impossible.

Interviewee Well definitely it would be legal. Right. So any of the legal advisers any of the well of course it can be outsourced by the legal team but not in the shared service center. Exactly. This can't. Right. So we can have outsource professionals and this can work very well. This can be also a TAC. This can be like we already say it I.T. but definitely it should be things which we'll have to think about the internal finance internal deal disk sales operations the core of that. Right. So the pipeline management forecasting and alignment with what the deal is that's things it should not be automated, or automated ticket or automated.

Interviewer Yes because they are, they also require deep human interaction.

Interviewee Yes. But also, very specific for the company itself. Correct. culture and the company knowing cried what the expectation, which is also very sensitive from quarter to quarter, So that's difficult to outsource. Just very difficult if we wouldn't be doing one quarter less.] It might be a very different approach next quarter and you know this would not impact how I.T. has to deal with our tools or this will not impact how the commission should be follow a country. I mean this is being agreed in the beginning of the year but how this teams are. Proactively always changing right. So if I hear OK we're going to do promo I have to go Christian how we support in business this quarter. This is something you can't outsource. You have to be a hand of the body.

Interviewer Yes. Yes. Yes I do know what you mean because is actually some of the task that every theory that you read actually says that she shouldn't automate or outsource or ultimate it because they follow the strategy that you set. So a lot of people are depending on that so you cannot just. You have to keep your main deals in your house and not put it in the neighbor's house.

Interviewee Yeah exactly. You know what this is also you. Something like you would not outsource MVP. Right. Oh you have directors because they have to be in tune and it is going to be suddenly change of strategy. They have to be able to follow and influence this market.

Interviewer Let's imagine a scenario where these administrative and repetitive thoughts we talk about in this scenario where a robot not the actual physical robot but a computer a robot a program take care of those tasks. All right. So this is another we are imagining. What do you think are the tasks that sales ops and deal desk and mainly the main teams or the back office should do to increase effectiveness.?

Interviewee Well you know I don't. I don't know what their deal breaker right is. What is their bottleneck. Why did things start to slow down. And I notice I mean even though I'm not working with the core of sales operation of your team anymore. Of course, we're hearing that right. So we see that the contrary assessments are not going as fast as they used to. And I think it has to do a lot with the fact that, first of all, we're not outsourcing is still all in-house right. We're going to do that in the Costa Rica office and we will see which tasks have to go away and it is going to really because we have to train these people you have to understand our strategy as well. But I suppose we just either don't have streamlined is good enough or. Effective use of the head count because if you think about it and knowing our organization since operational organization one hundred thirty people maybe more it should work right. If you think about. So generally, we should be more effective now by identifying what you're doing now. What is the biggest velocity of requests? If that's a country assignment. If that is an split request right. This mean something is not strategized properly in. Which creates a lot of manual requests? Because if you think about it. If there were a rule of engagement it says OK splits go. Automatically, which we introduced two years ago or something and it goes 70 to the parent (account) and 30 to the other, in the end that doesn't really work right. Because half of the time the sales ops have to go and request a change. So it is not a good rule. So will outsourcing solve that. I don't think so. Right so it's first of all that is identifying what isn't working and why and then when you identify. Ok. This will be a solution. How many people I need to be able to do this and what I need. Human aspect. How many human aspect or what can I automatize? right. So it's just strategy which has to be taking place. And I think some things are not working because they have to taken from the core. And I think they tried. And this is just a process of you know failures and decision making that you're going to get to the right partner because we're growing so rapidly is difficult. Right so I think there is a good willingness. And now we have to take to this next stage and really have a good people trying to review the processes and improve them. And automatize them and I think with our force what we have it can be improved. It could be

Interviewer definitely different. I agree 100 percent with everything you said right now.

So that's why I would like to give you the last question. And it's a very short one. After considering these scenarios and we just discussed about would you use automation tools to improve the effectiveness of your role?

Interviewee Well. Maybe there could be some areas where it could be improved. Right. Because it's still case by case. I'm very intuitive. Oh we cannot say it. I'm going to give on 850s this kind of max threshold. If the deal is around this number, it counts because very much depending if this is a global account manager. If this is inside sales so this is some things which many things I can't. But for example, there will be areas where we could automatize, and they will treat you right. If this is just having an. Optimization in the inbox assigning the task to the right specialist. If this would be triggering automatic involvement of legal because there is no recognition specific wording right. There is many things where it could be. Are we t that far? I don't know. So with what we have today available is difficult. And I definitely know that if I would to have one person who could stimulate for me analytics in a sense which I don't have access whatsoever to that I could have information which would help me. And this would be big automatization for me which I keep on asking and I'm not getting right. So definitely there is areas there would be no really much hope in the core of the functionality but a lot of areas around which would help me.

Interviewer I really like that answer. That was the last question.

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#### Delta Interview

Interviewer: Thank you very much for agreeing with this interview was so let's just go ahead with it what is your current role in the sales organization and for how many years.

Interviewee: I am the sales operations manager for western Europe United Kingdom Ireland and South Africa some reason and I have been in this job at Palo Alto exactly 3 years.

Interviewer: How do you define effectiveness within the sales operation process?

Interviewee I think a lot of it comes with experience where you pick up a lot of experience not necessarily in work matters, so a lot of things has to do with the organization and planning. And a lot of it is through experimentation and error but if you're putting the role where people look to you, then you have to very quickly or review what worked well in the past and even better if we made some adjustments for the future so it's not about what went wrong that's the negative perception, even better if, so people come to you and say "what are you doing in this situation", and a lot of time it is something that we've never heard of it is completely different situation and you think, right, what have I done in the past that works well is there anything that I can apply this situation, in the expectation that it will be a success and then you just do that as often as you possibly can and you will either built a reputation for doing it all or you build a position where you're comfortable taking those types of decisions.

Interviewer: how would you define the same concept effectiveness but this time within the sales organization process?

Interviewee well I think for the sales people, the question is how, the best salespeople are the ones that most well organized the days where you could do everything in a bar or on a handshake or by looking somebody in the eye We don't need that now, so technologically everything is done remotely but that does rely on somebody being very well organized

The best salespeople within our organization, within every organization I know, are experts administration that doesn't mean they are the best talkers, it doesn't mean they are trying to lie to somebody, but they're the best organized and people respect their efficiency and they know that they demonstrate they are doing a good job,

Interviewer what repetitive requests does sales operation face regularly according to your own understanding?

Interviewee the most repetitive request I have is reassignment of account ownership, simply because of the way we do things, it is not saying things are managed inefficiently and it's not something that we ever can have avoid but there will be many situations where a new account is created

and, the built-in processes that we have tried to create, make the wrong decision just because up to that point we thought

that was right decision so, I would have probably 50 requests a month these days can I change ownership of company eggs from salesperson A to sell person B, and that is a regular process, we are trying to automate as much as we can but it possible according what we do.

Interviewer so when is the second, because this was the most ?

Interviewee because of the way our company has grown, and it is a legacy issue, there are certain permissions that I have as a sales operations manager that salespeople do not have, so there are certain things I can do with, lets say quotes, I can assess if a sales person can apply discount with 45% and they can go up to a threshold of 50% but they will come to me to make the quote 51%, that doesn't mean I'm approving it I'm just the executor, I am executing this decision, so second most frequent thing is making adjustments to quotes there are adjustments that sales people or even people within the organization cannot do

Interviewer because this requirement sometimes go to your private inbox or sometimes they go to the sales operations inbox therefore how effective is the management of all these requirements over these inboxes

Interviewee ok I tell all of the Western sales guys not to send anything to sales operations inbox because historically, it wouldn't be answered I tell my guys to email me and most time to be honest with you they will telephone me or they will visit our office because almost all of our salespeople are in England,

and most of our business is London-centric the chances are if they got request they will wait until they walk past the office and I'll come and see me, or are they will email me directly very rare that my guys will send things to the inbox,

these days I don't even look at the inbox because it is managed so well but I don't have a concern

Interviewer so you tell them not to use the inbox because the you feel they wouldn't get the support they need.

Interviewee well, yes and now, historically they do not get the support they need, until six months ago, it was not run efficiently, where is only really been in the last year, there's been more resources and people in Amsterdam to monitor the sales ops EMEA inbox that it has been run efficiently. But before that, when we were a small organization everybody sent everything there. These days because there is a sales ops manager in five regions, we answer most of the questions independently

Interviewer so how do you think do, es this process influence the effectiveness of the whole sales organization? The inbox, the communication between requesters and the sales operations department

Interviewee in terms of effectiveness I think it's working very well the whole of the sales operations team where there is in Amsterdam remote people like me or are resources in the states, we have built a reputation for good response regarding of the company's reference standards, sales operations it seems like the place, if you want to answer something, a number of times people would say, I did not know who else to ask, but I thought to ask you, this doesn't mean I know the answer but I am in a position to know where the questions should go

In terms of effectiveness of operations inbox and the sales operations team provides all the solutions to make the sales as effective as they can, we are not here to sales the stuff, we do not carry quota, our job is to facilitate them selling, And we build a very strong reputation and we are being effective for that.

Interviewer Do you think you have a proactive or a reactive roll.

Interviewee I think you have to admit that you have both there are many things that we do that we can plan for, and experience of doing this job get to know the routine of things,

You know philosophically the whole world is dictated to by time so we know what deadlines we got; we would use that time right up to the very last minutes of a deadline so you can plan things, but there are other things that you have to react to, you know, there is just not possible to anticipate every situation

Interviewer I agree 100% and this basically leads me to the next questions which is basically, from these proactive tasks that you have, How structure are them?

Interviewee I think some of them are very well structured, documented, standard, under an organization-wide basis

so so for example, planning for the next fiscal year we already started that, we're already had meetings about the next 3 years and trying to anticipate how many staff we're gonna have, how much money that generates, so those thing are planned in a much larger

Level, on a day-to-day basis, for me I will have things diarized in my calendar either because I know I've got regular meeting I just know those things if I have the opportunity I want to get them out of the way because there will always be something that I have to react to so there are jobs that you have to do just because you anticipate you won't have enough time later.

Interviewer, sales representative requirements, Do you think that they follow a certain pattern? the requirements that you received from the sales team?

Interviewee Yes, most of them would be standard, there are maybe one or two people that asks strange questions, and invariably is same person will come with, 99% of questions are typical from all salespeople, some of them don't asking questions, but there will always be a person whether it's just their nature who ask questions that nobody has ever asked before,

Interviewer in a percentage roughly would you say, the questions follow a certain patter?

Interviewee, I would say 99% I know some people are strange question, very rarely, they have a reputation for asking strange questions.

Interviewer from all of these requirements that you have, you receive, under your understanding, what are the most challenging that you solved? Periodically, monthly.

Interviewee. The challenging one ultimately are where somebody has not been given an approval and they think by asking me that I can get that approval for them, it's a bit like asking your mother for something she says no, so you go to your father, so the challenges are the comments, I desperately need to get this discount I desperately need to get this product delivered here, and this person this other person who is the expert and guardian of that responsibility has said no, can you do anything. And that's challenging because I can empathize with both sides but you have to say: no no is no. it's nothing I can do, there is no magic key, Sometimes it is very challenging and sometime it is just not possible, and you just need to confirm others person disappointment.

Interviewer, are these challenging tasks repetitive? Or just one-time thing, and each of them is different?

Interviewee Each time is different, and again, it would only be the same person pushing the boundaries every time. But said that, that is why we employee salespeople, that is not for everybody, we employ people to be persuasive and to push the boundaries of persuading a customer, to buy something, for the right reasons, but their job is to be persuasive

and successful business, because that's why we employ them in the first place. So the difficulty is to say, no, it does not work on me. I understand everything you said, but the answer is still no.

Interviewer And how do you measure the effectiveness of the support that you give?

Interviewee the simple answer is that never hear from my boss, that's what difficulties of my job, if I'm doing a bad job there will be complaints my boss if I don't hear from my boss if I'm given a compliment my boss doesn't know about, in terms of my effectiveness, the fact that I do not have a bad reputation, the fact that people say, we didn't know who else to ask, we ask you, Personally, because I work for American companies for a long time and there is a time difference there was nobody that could help me until let's say 3 o'clock in the afternoon. 5 o'clock here, so what I would do in terms of measuring my own performance is , I would create a brag wall, you when sometimes you go to a restaurant. where you see a reference. So if I got a good message saying thanks Steve your champion, thanks XX you save the day as always great support I really wish for a favor, I would keep that and I do a PowerPoint slide

and I would stick, I would make it look like I posted a letter on to an imaginary board so that when I get to my performance review of my director who wouldn't know anything about it, you wouldn't know this, but here is a demonstration of 50 different emails that I got from people thanking me for helping them out. So I created a brag wall, otherwise, the only time when you get to know is where there is a problem if you feel doing a good job, nobody will pay you a compliment, people only give bad reviews, statistically, I think there is something like, you tell 2 people if you have a great meal, and you tell 15 people if you had a bad meal. The way we do things TripAdvisor or rated.com We all look for references from other people. If you mention positive, how do I measure if i have done well, I tell people I have done well I demonstrate it , You can double check with any of these references, here is the email, this is person-centered, thanks a lot that was great. And that is I how I do it.

Interviewer And what about efficiency? Is it the same?

Interviewee Efficiency, it is a philosophical thing, It is an attitude of mind. It something that tries to quantify. It is difficult because you will always have to live with the idea that you always have something else to do. The question if you have deal with all your tasks. Specially in palo alto there is never going to be a quiet time. The day raises by, the week raises by. In terms of efficiency, I can't think about a time when we missed. Some people will consider some task more important that I will. I

can't think of cases where we did not success because of time. In the end and in terms of efficiency, did we get that deal in before the 31st of the month? yes we did did we get it in at 9 in the morning? no do you think of it in at 23:59? Yes. The outcome is the same so that was efficient and I can give you case when we get at 6 o'clock in the morning London time but that was 1100 in the evening California time, so yes that deal contributed to our success , therefore, it made us more efficient

**Interviewer** How does the back-office performance affects the perception the clients have of Palo alto networks?

**Interviewee** I often hear we called the uncalled heroes, the unsung heroes. The efficiency of the front office, they are the ones who get the credit for it, back office, within our organization we are consider a parts of sales , now I support sales I am a significant contributor to the success of sales, and within this organization, I am sales. That may have changed in the past 3 weeks, or 3 days actually. I think this new structure commencing within the company, but eh, the sales people do the stuff. the customers buy the stuff if there's a problem with it, the customers ask the sales people, then the sales just know it will gets fix very few occasions where, we did what we call escalations, very few occasions where it has to go from me to my director to somebody more senior to think of something up

there are always in efficiencies within a system that often that's a legacy that's that's a growing pain everything that was a solution work really well when the company was one size but as It Gets bigger that is no longer fit for purpose

**Interviewer** The performance of the back-office influences directly the perception of the whole company

**Interviewee** Absolutely. And that build you up a reputation for the company, I personally would meet any end users that came to the London office and the comment will be: it's a great it's a great service from start to finish and even after the buying experience continues, if you want the measure of success it's a repeat buying . selling something is the most difficult part, once you have the customer, you captured them, and we make most of our money from repeat bookings

and they will only repeat bookings if there are satisfied that we have better than a cheaper alternative or more attractive looking competitor, they will stay with us because of the full buying process. And that is not just a salesperson who provide the deal, there also engineers that helped them with technical support, it is the whole buying process on a repetitive basis.

If you wanna share a measure of Palo alto success it is the fact that they have extremely high growth targets.

And those growth targets are achieved and that's primarily through companies that have initially made a purchase, are very satisfy, so they make a lot of purchase and that just keep growing

you're not going to have some spend a billion dollars on their first purchase they would rather spend 10 thousand dollars 50 then 200 and a half million, then they will do the \$1000000 or the 10-million-dollar purchase. Based on the efficiencies and the satisfaction that had in the journey so far, there are very few accounts where we have been displaced. Whether is the mature of our company or not, I can think of many accounts anywhere in Europe where I know we have been the incumbent provider and have lost to a competitor, but less than I would said 3 or 4 times, all over Europe, 3 years of being here I've heard that we have lost

**Interviewer** So let's go through the part 3 of the interview, how does the information you produce now would help to create a better sales strategy?

**Interviewee** Ok, so the information I produce, it is information that people have requested what you really want to do is to proactively anticipate what information could you provide to somebody that will give them a better understanding or more inside so I was working with one of your colleagues earlier, and he wants to report, so he asked, do you have this report? I said I do but it is a much bigger report I'll give you everything because I want you to see what information is out there, so what the best things is, you you anticipate what the next question is going to be, If i give that report, chances are you are going to want something else afterwards. And based on my experience I probably would have already built that report, and now somebody ask again and add Oh by the way can you break that down by the Quarter, and I was thinking, yes I think so and i had already done it. I didn't even realise but when I run the report at some point in the past 3 years. Somebody else asked that question, I replied at that time and stored the report somewhere at the time. So there are probably in terms of efficiency It couldn't be done in print things on paper, I probably have an Excel spreadsheet, I have a report that's got 15 columns but XXX was only asked me about one or two columns but I have to anticipate what the other questions are gonna be or I have experienced the question I reacted to the question in the past but I keep that report for the future.

**Interviewer** what is your perception of repetitive task and by this I mean how much do you think in percentage represent on your week

**Interviewee** I would probably say 20% of 30% of repetitive tasks, I mean for example all friday my whole day is doing forecasting and I do that every Friday yes, that is one whole day of the week It is like saying 20% of your week you are doing repetitive tasks. And then you have other stuff that comes alone. I could say 45 to 50% are repetitive tasks, but you often do not repeat them on a structured base. Just somebody asked the question before, the you see yourself repeating you're doing a similar task to what you have done before it's not repetitive task because it'll be a different outcome, a slightly different request but I have seen that request before

**Interviewer** if you if you have the power, what process, in your daily role would you outsource?

**Interviewee** well there are some mundane tasks such as building quotes, I am the gatekeeper of quotations simply because that's the way we built the system, but out of it, I have no expertise or interest in doing that job. So we would be probably outsourcing or given the task to interns the task of Quote building, and at the same time, bear in mind, as soon as you remove that task there will be something that fills that space, you fill the vacuum you fill the void with other staff. And minor things to do it for the licensing and the product queries. And product queries these days they sell operations managers are analysts and planners, whereas 3 years ago 5 years ago they were the closest thing to customer services as well so now there is a distinction between people like me to have very different little interest in the technical capabilities about products, nobody is going to ask me whether they made the right choice of equipment. Now if a sales rep wants to know how many of that product we have sold, I am the man, I can tell and present information, but we are not customer service anymore. That is something that it is a legacy. Sales operations used to be part of the accounting department as such or it fell within something, most of us have got a financial background we're not product query people

**Interviewer** Some of the tasks that we just described, they follow rules, they are rule-based task, so would you automate them?

**Interviewee** So I would say no quite frankly, the fact that somebody's got that query, means that they want a solution. And that solution most of the time can be provided much more quickly by somebody like you or me listening to them. Because the automation can cripple things the automation makes the accounts go to the wrong person, so it's my fault for automating a process and not anticipating where that path could go, so a lot of time so I would say no. There are many mundane things that can be automated but a lot of the time, people, want the satisfaction of talking with someone. They want to know who they are dealing with, not just a click process. A promise to say, I will fix this for you., because it is a unique situation.

**Interviewer** Following that thought what tasks are impossible to automate in your role?

**Interviewee** Sales analysis, there is not report that is going to tell me that you are going to sell something. You can tell me you are going to sell it, but I have to use my judgement and I can use any amount of data, algorithms, heatmaps whatever method you want to use but, it gets down to gut Instinct, you know, if it does take a judgement based on personal experience and an individual situation cannot be automated

**Interviewer** Imagine a scenario where this mundane task that you outsource, instead of being outsourced they are performed by robots, so if that happens what do you think the sales operations should do in that case.

**Interviewee** there will always be situations to deal with, hopefully more business by improving the customer experience. And the customer can be you, like a beneficiary, your time will be expend improving a general idea. The end user customer, everybody, including stakeholders. Every stakeholder will appreciate the more time you can expend with them. The danger is when you automate things you damage the customer experience

**Interviewer** following that comment so would you increase the effectiveness of your role in the sales process?

**Interviewee** education, better education for me, and better education for all the people that come to me, but nevertheless they still gonna come to me and I'm still going to have to deal with the issues, so maybe I need to learn how to automate, and they need to be smarter themselves before asking so many questions. Again, there is always who is going to ask you a different question, even if all the other people know that it is a ridiculous question

**Interviewer** would you use automation to achieve this?

**Interviewee** , no quite the opposite, I have to learn something I need the time, It cannot be automated I can't expect I can't expect for someone to make a ticket and response, that can't be automated, that is a personal experience, it will end with dissatisfaction.

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Iota Interview

**Interviewer.** Thank you very much for having so free minutes with me to have this interview. I would like to start with the first part which the introduction is so the basic questions such as What is your role in the sales organization and for how many years.

**Interviewee** So my name is Jacob Peterson and I have been with Palo Alto Networks for four years and I'm working in sales. I have my own account segment so I'm working I say TSM Territory sales manager for Denmark. So I have basically the entire small and medium businesses in Denmark in my account segment and I've been in my current role for one year and previously I've been working together with origins and country and since a year I have my own sales segment to work.

**Interviewer.** Great.

**Interviewer.** How would you define effectiveness in the whole sales organization?

**Interviewee:** In the whole show including US salespeople and the back office or sales ops?

**Interviewer.** And how would you define effectiveness in the Palo Alto sales organization.

**Interviewee:** From a scale from 1 to 10 probably you would like to hear it or. Or your thoughts work. How would you define effectiveness as somebody today?

Interviewee: Probably it's probably above average. I would say so from 1 to 10 I would probably give it a six or maybe a small seven.

Interviewer: Okay. Yeah but how do you define that. That is how I live I. Yeah. What is it. What is effectiveness for you what. What is the meaning of that word? Okay. In the sales organization.

Interviewee: Okay I guess. So in my opinion that would be that you have an organization where first of all you can do as much as possible yourself without interaction with colleagues. That's of course the most agile thing so that you can just go. But of course, in an organization like ours we need. We need to get certain things approved. Once upon a time and then I need help in those cases from sales ops deals desk data governance and other departments as well. And that is going really well I think so I would rate that quite high. So that's in terms of getting quotes approved putting together deals to make it attractive for a certain customer. Giving them incentives to lay in order within this quarter for instance all of kind of stuff and that's working well really well. And where we are probably not so effective efficient is within sales ourselves and because we have to do so many things on our own. We have to follow up on leads. We have to develop leads ourselves. We have to cold call and we have so much administrative work to do in Salesforce updating all the deals with all kinds of things Commons dates sales stage and everything. Contacts and in that respect. I don't think that we are very efficient in sales ourselves. I think the efficiency comes actually from the back office. They are very efficient in my opinion but in sales itself could be better.

Interviewer: Okay. So you touch both as you know in the front office and the back of his right to back offices people is behind stage you feel like we're setting everything all the equipment so you can perform yourself at the best in front of the client because at the end of the day you are Palo Alto face if you like. So under that taking those concepts is there any difference between the definition of effectiveness in the back office or in the front office.

Interviewee: I think in a essence of things no there should not be any difference but in reality there is. So I think that both in back offices as well as in front office we should be agile should be very efficient. But reality is that it's not. And as I said before I think that the back office they have much more defined roles whereas me being upfront you know facing customers and partners and Distis and I have a lot more complexity as I said you know I need to start up deals from zero cold calling identifying the accounts I want to go for and so account mapping. Following up on leads being a. Identify which needs are worth going for. Which ones. Probably not that important. I'm developing my own leads. And then when you get into opportunities you know it's all about you being on the ball all the time and making sure that nothing slips. And it can be very difficult to be efficient because there's so much to do all the time. Yes especially in my account segment I have basically an undefined amount of accounts. So it's it's a huge whitespace which may say it makes it makes it complex and you have to manage your time very well because otherwise. Otherwise it's it's easily getting too much, so you have to focus on what is important okay. And if I do that I can be as efficient as possible but overall, I will I will I will never be as efficient as the people in the back office.

Interviewer: Okay understood.

Interviewer: So now we are proceeding to the second part which which are questions about the process as is now. So what are your thoughts about that. And the first question would be What tasks do you require frequently to sales ops or to the whole back office.

Interviewee: I need feedback from sales ops. By far the most. I would say what I need is sales ops 95 percent of the time do you this the other 5 percent. That's how I split. I have quite a few questions for sales ops of a huge variety actually.

Interviewer: And is there any frequent task that maybe you do a weekly or monthly. What task is that.

Interviewee: Yeah that could be approval of quotes. We have many complex quotes nowadays. We have campaigns we have various package deals where I'm not entitled. I'm not allowed to go in under my own opportunities and apply those discounts. I need to get sales ops to do that they're the only ones who are entitled to do it and that is not being very efficient of course from my side. But when I ask you know I quite often get an answer pretty quickly pretty quickly.

Interviewer: Ok. Are these tasks then repetitive? Are they the same? Yeah. Each quarter let's say that.

Interviewee: Yes. You don't have too many emails every day or every week. Okay.

Interviewer: So how often do you contact sales reps or the back office in a week in a week.

Interviewee: I would say I would say 10 times a week.

Interviewer: What are the main reasons?

Interviewee: The main reasons are I need approval and quotes, or I need quotes to be amended. So for instance we have traps our endpoint client the default number of clients we can quote in sales is two hundred but we are allowed to go down to 50 but I'm not entitled to go in and make that change down to 50 sales ops they are the only ones who are going to do that. So those are the typical kinds of questions I have to go to Sales ops with repetitively.

Interviewer: Yeah. Do you get support any time of the day.

Interviewee: My feeling is that I do. Yes.

Interviewer: Okay. And what is the longest that you waited for a reply.

Interviewee: There have been cases where I've had to wait two weeks.

Interviewer: How is this impacting the relationship with the end customer.

Interviewee: It could be yeah.

Interviewer: When you get the reply. Not two weeks but literally that you need a replay today. But you got it. You have it five years from five years. Five days for it today is this reply effective. Is it what you need or you have to go back in.

[00:09:21] Occasionally. So first if I had to wait two weeks. Of course, I had to send reminders. But I would say in general it's it's pretty quick. So when we talked about the amendment of quotes and also just approval of quotes that normally goes quite quick. And that is nothing that is jeopardizing their relationship with the customer I would say it can be if we are really at the end of a month or into a quarter you can be tight. If we're going to put a deal or not. But in general, I would say no.

Interviewer: Under the current structure I know under the current process. Do you think that or what is your what are your thoughts about territories are they define according the sales representative capabilities?

[00:10:18] Speak for Myself on General. Yeah. Your general thought I mean I want a complete view.

Interviewee: I would say from a sales point of view. Yes I would say that that's a pretty good alignment. I mean I'm Danish and I'm responsible for Denmark. It makes sense. We have other functions in our sales organization which are not that well aligned. For instance, if we talk BDR BDR quite often have to cover more countries more territories and that's not very efficient for sales I would say yes it's efficient. Okay.

[00:10:53] What about quotas does are there. What are they well-defined the quotas are well-defined because our quotas are built of course and a little of complex way. But I would say yes they have well-defined Yeah.

Interviewer: Okay. And what do you think about the forecasting process.

[00:11:14] The forecasting process. I'm not happy with. I think that we are not very. How could I say that. I don't think that we are very. We don't have good vision in the forecast. I think, for instance me I have to do two forecasts every week and it's basically for the same business. But it's because I belong to an inside sales organization on one hand and on the other hand I belong to a territory or a country organization in country. So I'm kind of like I have two reports and they all want my forecast and they all want my forecast in a different way. So that is not very efficient.

Interviewer: Okay. So you're made you just mentioned that the forecast sometimes you need to do both. So you do more as an administrative work. Yeah every week. Yeah. How are quotas. Do you do this process easier and faster. How do you define the quotas.

[00:12:15] So I don't defined defined quote. That's something which management guys. I can not impact that.

[00:12:22] Okay. So you have no they don't ask you they just give you a number.

[00:12:27] Yes. They just assign a quota to every sales rep.

Interviewee: Okay.

Interviewer: So do you think that, how does a back-office performance affect the final customer perception of the company.

[00:12:48] I think that if we if we tools talk sales operations because I mean for the end customer they don't see a difference between the different departments within back office. They just say you'll see it as palo alto networks. So in general I would say from a scale from 1 to 10 I would probably say. Between six and seven, and I would say that if you split it down internally, I would say that the biggest challenge is probably at deals desk which is also logical because those are the big deals that are handled by the use desk. And it's always about discounts and customers always want more discounts and if they don't feel that they get the discounts that they think they require. Well then we might potentially get a bad reputation. Yeah. And that is basically only deals desk because I mean sales ops, they don't have anything to do with sales reps or data governance or whatever.

Interviewer: But the structure the structure of this whole back office is now. Mm hmm. presented that you call is not supporting you. If they perform well if they perform above expectations or below expectations or lower is that they're changing each performance. Do they have any impact on how the customer views your work?

[00:14:29] Could be. Could be I'm just thinking about examples. I mean I would say especially if the customer has to wait that's probably the worst. Whatever the outcome of the request is. But I think that the timing is what is probably the worst when we keep the when we keep them in the dark for too long that is. That's never good. Customers they want to access answers. Yeah. So difficult to answer but. I would say yes it has an impact.

Interviewer: Great. So now we will move on to the third part which is the process to be. So it's pretty much how will the process be. In a world where we can just optimize several task so for example the first question is when sale sops implement new processes. Do they ask for your feedback?



[00:15:46] No.

Interviewer. Do you think that asking for your feedback. Increase the efficiency the effectiveness of the back office.

[00:15:54] Yes.

Interviewer. How and why.

Because I think that I know that's not something I think that should be a fact that for sales people being in the front of the field we know what's going on we need what we know what the customer is asking for. We know what kinds of tasks we have to go back to sales ops for repetitive again and again and again and we know or we definitely have an idea I have in terms of how we could possibly streamline those processes make it easier maybe even automated automated or whatever you call it. And so yes I think that we should definitely have a say in that.

Interviewer. Okay. And when you think about the task that you ask or the requirements that you have because you mentioned for example on deal desk some of them follow a certain rule. Yeah. For example, in that governance there is a rule. So the process follows those rules. So basically, if the rule changes the process will change because you always are aligned with the company policy where the company's objectives are. So for our rule based repetitive requirement How do you feel about interacting with an automated system.

Interviewee: Uh I'm very positive about that.

Interviewer. Yeah. Or whether you're thinking it not having human in contact. Yeah. Is it okay for you.

[00:17:39] Yes. Yes. That would be perfectly okay. But it has to work of course. Yeah that's logical. But I mean if we if we for instance could just go in for instance and just coming back to two examples when we need to get a traps quote amended from 250 licenses that should be something that I should be able to do myself and then somebody in sales ops would be able to approve it. That will be much easier I think. Or even if our disti could be allowed to do that. That would also be great with an approval from sales officer, whoever. And the same goes for special quotes that needs to be approved for whatever reason. I mean that's would be able to be automated. So. So if if a certain discount that I have applied if that's within a certain it within a certain range it should be approved by default. Probably. Yeah.

Interviewer: So you basically don't need human interaction for this kind of requirements.

Interviewee: No no no no.

Interviewer. Okay so that leads me to the next question like that that would be what systems or what requirements do you think a system a computer or this robot would not be able to solve.

Interviewee: I think that deals desk is complicated because that would again require that we as salespeople have to go in and do all the the the calculation and I don't think that that's efficient because also salespeople we don't have the knowledge. With all due respect for ourselves but we don't have the knowledge about the company policy in terms of our objectives and what we can allow to go out to market with Violetta and the other colleagues and deals risk. They have that knowledge and that's crucial. So I would rather not have that to be automate because I think that's a little bit dangerous. Of course, you can you can build everything based on rules as well but I think it's that complex that you still need. You still need a human brain to review that every time.

Interviewer. Okay. Yeah. And why do you need this human interaction. Is it because you are negotiating or you have to explain a lot of thought? Yeah or is it because you need to have human reply and argue with it and maybe ask more or less and it's about a political role.

[00:20:31] It's a very good question. No it's not the last part but it is purely that what we are asking and deals can be complex. Many times, especially big ideas that can be complex and there can be many many factors weighing in as reasoning why you need this and this to be done. And I see definitely a continued value of having human interaction here maybe also because I think that our ideals that they they're really really good people they they're doing their job exceptionally well. And I think that that will be very very complex to. To optimize.

Interviewer. The decision itself of the of the person is either to approve or not approve the discount rate but the whole process is just a completely different stuff because you need more information about the market why are you asking his approval.

Interviewee: Yes it's such extreme much more than just approving or disapproving certain incomes because they also have to apply to discounts and and also come up with the discounts that they recommend. So basically, what we do is that we submit a standard quote to deals to ask for a certain deal. I'll have one today by the way it's three pages big the quote for 250 K deal and it's not for them to approve or disapprove. That's only at the latest stage. First of all they have to go in and look OK based on the configuration. Where can we go in and do something on the discount. Can we only do it on the hardware. Can we only do it on Panorama. Can we maybe do it on the on the subs as well. Can we maybe do something on service as well or support can we maybe do something on traps. Or can we maybe pull another product in even which could. Make the whole configuration more attractive for the customer and even give them a better deal. So those are the things that sales reps are exceptionally good at nothing.

Interviewer: And that's when they recognize these patterns. Right. Because they're actually checking your whole. Yeah. The proposal that they're gonna send to the customer and they're going to check and see patterns and say okay. As you mentioned in Panorama we can maybe discount this amount because we will then get another amount in traps and so on. So they have all this knowledge. Do you think that they do that repeatedly like they they do this with you and they have the same media with south. Yes with people in other regions. Yeah. So would you agree that they learn this by experience like they did this in the bus. So they think that if it work with the north it may work. Also in Central. So why don't we apply. Do you think it follows that logic.

Interviewee: I think it follows that logic. I do agree on that. I'm just thinking. I do agree on that but adding to that. As I said there that there are so many factors coming into consideration who are who are we up against. Is it because maybe maybe Fortinet it is stronger in Turkey and Cisco is broken Denmark? And who are we up against. Of course, what do we need to do. It might not be necessary and necessary in every country to go down or to apply the same discounts for the same deal because the market is different to competitors different. Yes. And also when I said. The company we are in is evolving all the time we all know that and we are adding product all the time not only adding product and adding solutions but we also are amending our prices our list prices. So for instance if I have a deal I'm just going to make very short. If we have a deal and I have traps in there deals this they might come back to me and say hey you know what. We can actually make it a very very attractive quote for the customer if we swap traps with XDR because in XDR we have traps included. So if we can maybe do that with them then I can actually give you a great discount. It would be much better for the company and if you can convince your stuff like that. Okay so that's also what they're really good at. I think looking at the big picture because we do this well of course I tried to position XDR as well. Yes but I quite often think you know that's probably going to be too expensive for the customer. But then they say hey but you know what I can pull the plug with the deal in a way that XDR actually looks cheap because we've been go to give information discounts on the hardware for instance and they get us already a little bit less discount on the hardware. But then the big discount on the XDR. And then they might buy into it you know and we have an overall much better deal. Yeah.

Interviewer. I mean what I understood correct me if I am wrong you have a deal which was you are thinking about. Presenting to the final customer right. And the back office in this case deal desk needs information first about outside of the company so the country the competitors the policies the economics of the country where is it going. If if the country is investing if it's part of a bigger so it's outside knowledge and at the same time it's also inside knowledge. So are we promoting this equipment? We've been better. Yeah. Do you want to position at this better? Do you have a certain amount because we have a stock of these somewhere? You know there are two big points of information correct. Do you think that for one human is a lot of variables to recognize in the second that you are asking the replay for them.

Interviewee: Yes. And maybe even to me. So I mean I can definitely understand if you and I will also support you if if you're contemplating doing an automation of that it could be very very interesting to do. It will be quite a big matrix to set up but of course it's possible. And it could be interesting to do that. Yes you're managing big that day right. Yeah exactly. And also there's also I mean we talk about it. I mean you have external factors you have internal factors another external factor which is purely customer related is also. So what's the potential effect of this customer. This might only be the first deal of a much higher potential with this customer. So you need to think strategically as well with that customer because we don't want to put them off. With the first order you know we want to make sure that they order the first order. Then we are in. And then we can build on from there on the other hand you don't want to go too much down a discount to get that first order because that gives what you called it that will make them think that they can get the same discount for the future as well. You know depending on the customer the customer size the customer potential as well that there are many factors to take into consideration.

Interviewer. Yeah. Yeah of course. Because in this system that is the process to be. There is one automation system which grabs historic information about all the things that you have sale. Yeah. So it's it's an electronic brain. It doesn't forget know it's always there. Yeah. And plus, you have information about what is the current situation of the country of where you're selling or your territory. And plus the inside information of the company so the people in the back office will have all this information there not disorder but in a comprehensive manner. So this this is as far as the automation can go because after that this person will have to go and assess to go in and intervene. Yes. Yes. I will give information opinion but always with data behind and that data is relied on into our system because the system is very hard for the system to make a mistake in numbers. Yeah correct. So would you. Well I would just say that this system will increase the effectiveness of the sales organization.

Interviewee: Yes.

Interviewee: In which way it will make it faster. It will make it more agile. It will make it more accurate. It will make it more consistent. I'm just thinking I'm so agile. Faster consistent you can property as a sales person. I'm just thinking now you can probably also impact or tweak it more because you can maybe you know you probably have to fill in certain things. And then in order to get the output of course and you can maybe you have a.. I will definitely be positive about it. I Think It would be a very good thing.

Interviewer: In the current sales process, the one we have right now, what task or process would you change to increase the whole effectiveness?

Interviewee, In the sales stage? Or the process? So in the sales process, So what i have started doing at the beginning of the fiscal year, is to let our disti, we have a single disti policy in Denmark, to let them do as many quotes as possible. So all the standard quotes under certain amount. They are doing it so that is already there because that frees time for myself. I mean again, if I had special quotes, they should be able to be approved quicker, that should be one click of a button and approved. That could be better with an automated process, a computer is always faster than a human being, amending quotes as well, if

a certain quote or discount is within policy, that should be an automated process, I think. Should not be necessary for me to write an email to sales ops, so that could be saved as well. Probably letting the disti have more access to our systems as well with the partner portal could be a good thing. Maybe even having our distis being able to direct contact with our back office, because right now everything has to go by me, and that is also very time consuming for me. Whereas If I see a big fish in the sea, I could just go directly, or the disti could go directly to the sales ops, or well deal desk, well not deal desk because I need to be on that, but simple things which are now going to sales ops, those should either be automatized and or it should go directly between disti and sales ops, not involving me that should be possible.

Interviewer: Yes, understood, so in this perfect situation where we achieve the level of automation that is possible, the limit. What kind of insight of information, do you psect from sales ops or the back office to make your job easier? Where the basic administrative tasks are

Interviewee: In an ideal world I would even need to be honest, that might sound rude. If as much as possible it could be automated, that should, that should prohibit me to having to contact them all the time.

Interviewer Do you see them as advisors in this situation

Interviewee: Yes, because we still have, we talked about deals desk, where you still need the human interaction, the same goes for sales ops, where we have more tactical plays, so it is not so much of a numbers game. But it is more like when we have, for instance interaction between various stakeholders on an APEX account, where you have sub accounts, I have for instance sub accounts for 4 apex accounts. And I have a deal I need to have sales ops involved because we need to have a certain split between the APEX owner, me, eventually somebody else. That could be also automated of course. Staff like that.

Interviewer You are going on to the right path because you have to imagine how would that be in case that the administrative operational tasks are easily done. You do not have to spend too much time on them, they will always be there, but it will be you feeding that system who would help you better so in that case you need human interaction with sales ops with deal desk to give your insight about your strategy, so, what are your expectations of that, what would you expect.

Interviewee: I would still expect that I could get that advice, those strategic thoughts, from sales ops and deal desk, even if basically all the manual work could be automated, I would still like and need.

Would you approach a client a client with a person from BO, you will have the conversation you will have and advisor?

Interviewee: I would like it definitely.

Interviewer Why would you like that

Interviewee: I think that when we talk about strategic thinking and strategic advice, I think you point early the current people in sales ops and deals desk they build so much knowledge from dealing with different sales team, different countries different types of customer, and vertical, like healthcare is very different from a manufacture site. Or a bank of instance, they all have different requirement, and they all work in different ways, that is why they need to be approach on different ways too. And I would definitely would like to have that resource or access to the resource, absolutely, I think it is very valuable, me as a sales person I can talk to my peers I can have my own experience and my own knowledge in my head but they know much more than I do, because they deal with ten folds of the I mean similar deals than I do, they would be able to give me much better advices than any of my peers can do or my own brain can come up with

Interviewer Basically because they have the systems with the information and because they have the overview of the region, and because we live in a globalize world, we can predict certain trends according to certain political moves,

Interviewee: And that is very a very good point, because I think that if you automated things you will also be much more a much better record in terms of what kind of repetitive questions have been asked for, for quote approved, or quote amendments deals that need to be put together in a certain way, and we can probably because that is of course market knowledge, that is all in a certain degree competitive knowledge because it built to beat our competitors and win deals, and I we can build that, if we can build that knowledge by automation we have an incredible dabata base, based on which we can price our future products and future campaigns as well I see big advantages,

Interviewer Free people from adm tasks give them time to have cognitive thoughts, you are human, when you are doing adm jobs you are a machine, I think that is the interesting part of robotization. Because it si not replacing human, in a very philocaly way it takes the robot out of the human, make the human not only entering info and repeating, but imagine, and thinking the impossible. I think that is the part where the future offers us, that leads me to the last question which is , in this kind of situation, in the present, what type of feedback do you expect from the sales ops roles or from the back office, if you could built this process again, do you think they should have a proactive or a reactive role?

**Interviewee:** That is a good question, so if I understand this correctly, whether sales ops should have a proactive or a reactive role? That is a good question, now they are entire reactive, and of course, the questions almost answer itself, it should be proactive, I am thinking how and if that would make sense. So I think that the proactive things comes as a I mean I know we are talking about the current set up and not the future, right now my expectation cannot be any different that them to be reactive, because they rely on my asking thing, they never come to me to give insight, never, even if we have quotes in our system, I am not blaming them by no means, even if i have quotes in the system for big deals, I never hear from deal desk, hey we saw that you have this quote on this deal, we wonder if you maybe wanna do this to make it more attractive, I am not saying they

should do it, but to answer the question I would like that feedback. I would like them to be proactive. We should make them proactive, specially deal desk. I cannot see a necessity for sales ops to be proactive, although if there is a split sales ops is deals with smaller deals, like campaign for firewalls and traps, maybe from the sales proactive task for smaller deals, maybe do them as Comp, but deal desk for sure, I would have to think about that, but yeah.

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#### Theta Interview

Interviewer: So the first question for you would be am what is. What is the role you play in the sales organization and for how many years?

Interviewer: OK so well as major account manager So I'm in charge of eight large account here in France. Especially. accounts in the energy industry. so it is a vertical alignment. I work for palo alto networks more than four year.

Interviewer: great, according to your experience and all this time did you spend with Palo alto How would you define effectiveness in this sales organization.

Interviewer: I would say it's the worst and worst. Well I mean it's a really tough question. Effectiveness of sales organization that is the point. that is the question sorry right. So when you look at the result I would say effectiveness is very good. I mean we are having a high gross, so it means that the sales organization is quite successful in correct.

Interviewee: So how would you define if an organization is effective or not.

Interviewer: Making gross(profit), acquiring new customers, so expanding within your current install base to be able to develop your new technology in nutrition. That's how I define.

Interviewee: Okay. And what about the back office the sales back-office services back office.

Interviewee: Yeah. This is . A western world sexually. I mean it's more and more time to spend with the coffee section okay. And I would add a comment there, It's also you know you're changing with the let's say the internal resources and globally. So, I mean support. I mean profit sharing services.

Interviewer: I mean you know sales specialist is that there is a challenge I think is that without multiplying the resources we at the end of the field, we don't find any comparable person. And that's that's a tough challenge. So you can be you know you can ask someone with that say it's not my task it's not my role go ask sales ops, No please go ask deal desk, no case go ask deal order and so on and so on.

Interviewer: Okay. So definitely there is there is a problem we are facing sometimes challenges. We need to overcome in order to accomplish your goals and maybe the back office is not up to the challenge to help you.

Interviewer: Yeah.

Interviewer: Okay so let's move on to the second part which is we're going to ask you some questions about the process as it is the current process. So what task do you usually require from the back office

Interviewer: so it's starts with the MAM support team. who Is managing my reporting ques and quotes and then I need to uh. go with deal desk. If I need a nonstandard price then. Yeah I know that that's the first people I am in touch with. I can also be in touch with data governance and sales ops as soon as you deal with international customer. So the challenge is not all services are on line with how to a quote in Salesforce I have a recent example data governance is pushing to have not several site per country for customers in some areas per team, plus then the discussion is absolutely requiring that your quote is reflecting the other and vice versa, I would say so you need to have the exact site address for your account your code so there is a product there. I mean they are not going in the same direction. So what do you do at the end. And that's the question transcends and Then turn around. Well nobody is able to give you an answer. Well you really waste time really.

Interviewer: Understood and are this task that you mention repetitive each week each month. Or they are new every time.

Interviewee: No I would say that they are repetitive, I don't see any new test I have to say that MAM support the team has brought me a lot of help and support. They are very active on. I mean they help me to get over my back office tasks or managing all my lets say all my back office in sales force saw that he was OK when you said I'm pushing maximum to our partners so they can manage this but as we are not clear in terms of its rules. So the example I just gave, even if your partner register a deal, at the end they will ask you, what about the site. Otherwise how should I manage that. I need to create a contact. Or should I manage that on stamps. So you spend time because the process is not fully

Interviewee: understood. And how often do you contact the MAM support or the deal desk in a week or in a month

Interviewee: every day. Okay understood. And you get your you get replies also every day.

Interviewee: Yeah.

Interviewee: And again, do you get these supports any time of the day.

Interviewee: Yes. Maybe. So deal desk and MAM support are very reactive event.

Interviewee: So let's let me maybe. And then this, the time to approve a could can be long you can be obliged to ask the final approval to just to approve your quotes So sometimes takes four days. You don't know why so this at a deal desk level because the last approver is from deal desk. Sales ops is honestly not reactive for me. There are many many questions that I ask and not answer so maybe because they are not accountable for and do not have the answers but. Again, here and example of how multiple centralized per account. I'll ask this. Two days ago I haven't got any answer and I'm waiting for to create my quote. So it's two days last to issue a quote to your partner. Then you know it takes at least 24 48 hours for the partner to approach your customer, at the end. You know it takes you on a week to issue a quote for PA220 or cluster which is not a good sign for a customer.

Interviewer: Yeah. Understood. And this timing these delays are damaging your your daily tasks. You know you're also getting delayed

Interviewer: yes on damaging or so how reactive we are in front of our customer. So go Globally are you Major. I mean it left the impression to your customer that you're overloaded. It's not really at your level, it is because your back office, is not up to speed on that. That's a big challenge.

Interviewee: What is the longest that you have that you had to wait for a reply. Do you remember

Interviewee: I think more than two weeks.

Interviewee: OK. That's a long time.

Interviewer: So do you think these management of your inquiries you see it right now effective.?

Interviewee: No no no. Again, some time we don't have any answer on we need to to ask again or send a follow up email shows the people.

Interviewer: Yeah sure. Moving forward with older tasks that may be they perform. Do you think that the territories are defined according to sales representative capabilities?

Interviewee: Yes I think for a non-owner you know we have eight tax accounts, It's pretty effective. You are called on the different sub accounts and subsidiary. Okay. So yeah I would say yes. Okay.

Interviewer: Understood. And what about the quota definition is it clear you see the well-defined

Interviewer: Oh yes. I had two media Yeah that would be it would you I challenge for me. I will be sure would not understand my quote. Great is it's mandatory for me to clear our key objective and clear our direction on what I should get for the company.

Interviewee: Yes. And what about the forecasting process.

Interviewee: Yes. This is strange to manage both Clari and the Salesforce it's it's confusing to have two tools, honestly. You know you go from one to the other. You always have to have both of them open when you manage your finances. And then you are you know a pledging in Clari it's the fact that we have two tools is. Confusing.

Interviewer: Understood. And do you get support to use both tools?. Well you have to figure it out by yourself.

Interviewer: No actually owned by myself.

Interviewee: Okay

Interviewee: then also. So I think since salesforce forecasting process it is too theoretical you know you had different stage to fill on the opportunity level which is naturally affecting the reality because you are pushed by your management for instance to to commit your opportunity where I was not sure if they would submit the purchase order or a letter for instance, so for me there is a kind of oh can I say that. Grey Zone lets say, what you reflect in salesforce is not the reality but because of show management pressure you. Yeah. You you are not really aligned with the transition stage of the opportunity. And then if I let's say you sure don't have the chance and you need to go back on a commit deal that's that's where you are really. Let's put under pressure by your management so that this is a kind of game that is not going to help you out on salesforce. I don't know if I'm clear but

Interviewee: yes definitely I mean I can I can understand this and I have also had some other interviews with people on the field and so they feel pretty much the same about the forecasting process. So OK after after after discussing this how does the back-office performance affect the final customer perception of Palo Alto.

Interviewee: So again, reactivity to issue a quote that's really there. That's the first point. There is a second area where it's really tough. It's when you want to propose a ESA or ELA know a mix of existing install base. And so for show projection for again a larger account with several worldwide contact. The account ID etc etc. Yes it's really painful, and at the end. You can be even block to to launch the initiative to see if it would be a what to have a ESA or SLA propose to your customer.

Interviewee: Yeah he's definitely clear

Interviewee: and the reason why is that if I describe the process clearly you show customer as a back line support you need to give us your support renewals team to issue a quote, to migrate this customer from from backline support to premium support

so direct support, there you have already some time that you can spend with the renewal team, to understand, then you need to inventory and find the best way to process. as soon as you are ever seeing a change for the customer you can then ask for shipping and you say. But again, do you inventory of all of your conscience is a challenge, so I think we are not efficient.

Interviewer: Understood. Yeah it's clear. So would you say that if we achieve and secure this task that if we make them effective and efficient and we help you to achieve them this will definitely increase the the the the response to our customers and they will feel and they will perceive that change.

Interviewee: Yeah for sure for sure. Great. There is a space for improvement. Yeah absolutely.

Interviewee: Great. So we already spoke about the second part is how the process is so we're going to move now to the third part which is how the process could be so yeah maybe one last point we have in the process.

Interviewee: Sure.

Interviewer: I don't know if sales ops is involved but there is. a big challenge for MAM which is around a split request between countries between region yes and anything is automated. Nothing. I mean so it's my responsibility to go through all the opportunities what opportunities in my account to claim for a split to then fight against the local rep, when I say fight. If the rep doesn't answer your request data governance or sales ops will not support you and you can lose a split which is really unfair. Which is really something annoying something I would like the company to take risk and take responsibility there. This is not normal that when someone a local rep doesn't transfer. It keeps the revenue. That's something that is unfair. Clearly and you know as being a MAM the challenge price is that it's you need direction and split. We work at the cooperative level. All accounts. And then there are some decrement all around the world. So you you know you give a revenue, you you give opportunities to a local rep whereas you never assume the counterpart. I never had to stand there for years someone who say look you would have you will be split for an opportunity one in France on your account doesn't exist in that sense. And go for it. It's a painful process and it's here and I I feel the rules of engagement are unfair I should feel empty. Let me give you an example. We have been approached by Schneider Electric at the technology level, next gen firewall and with our product Cortex. Everything is decided at the cooperate level here in France. Even the orders will be passed through France. So the process is a order issue to a dimension that the clients issue to to join France from there they will deploy to different countries all around the world. I don't see the booking. It's recognized on the contrary that he's deployed and I have to split the whole revenue. So I'm fighting to have at least 70 percent whereas the local rep is really doing nothing there. The quote is managed by MAM support here. The opportunities or so it just has to do to to get the you get the order on don't you automatically. And even there I am obliged to chase him so and last but not least if you miss by your day you know the time to to request your speed your you lose it. And this is I mean it just isn't fair to me. I mean so it means you know I have to have my calendar every end of the month I quit almost half of them there I mean I am not there just crossed revenue. I mean it's it's something that needs to be taken into account. I understand because one of the main objectives when you're managing sales team is to ensure the teams ensure they are happy with what they do.

Interviewer: But moreover, ensure that they get the correct recognition of their work because if they don't get the correct recognition, they feel like their job is just a waste of time and maybe the recognition is just not what they were expecting. So this definitely impacting cognitive work that the sales people have and this feedback is it's super insightful because it will give us a complete overview a whole administrative process could also change the view of the sales representative when they want to have the incentive back. So it's a very sensitive task actually that we should deliver more efficiently and we should help you to achieve the goal easily. Thank you very much for that. So now about the to be process I would like to start with a question. When the back office when sales stops or do they ask or whoever implement a new process. Do they ask for your feedback?

Interviewer: No

Interviewer: And do you think that not asking you for this influence the effectiveness of the complete organization of the back office.

Interviewer: Yes, for sure. I mean we have much lower right in the salesforce system for instance, on the discounts and so on, we have been I have over the years seen change, and I feel that I am obliged to ask to deal desk to modify your feed and make calls for instance, So there is pain. Yes, severely I've been asked to talk about new process. For instance, the ELA for VM series. they never asked me that so it is distressful. I mean all maybe. Yeah. The last example I have, so I don't know if it falls under back office or product team but when you look at the pricing that has been defined for Cortex based on the number of Tera I mean that's a scene that's not what the market is expecting honestly. I mean we are never being asked about what we're seeing how the competition is there. So I don't know if on the sales ops or back office process but that is my feedback.

Interviewee: Yes yes it has some relationship with your correct. And there are definitely so some of these tasks that follow some rules. So the tasks, some the some of the requirements that you have whenever we get the requirement they follow a certain rule and they are logical tasks. So they are basically under the company policies where they are either under the rule of the sales department itself. For example, when you apply for a discount at you discount the system and the people really know who to ask what is that there is called for each approval and so on. And also for that that governance when you want to change territories it follows our rules so that an account would fall under a different territory depending on the strategy that is defined at the beginning of the year. So how would you feel about interacting with an automated system that that that replied to you for this repetitive rule-based requirement.

Interviewee: I mean as soon as it first to reduce the time to answer phone and I mean then I have no issue is that I mean again it's I think ideally if this is an automated system, I would not have to interact with it. Let me give you an example. There is a frame agreement who is one of my largest accounts XX we have to talk with them every time. This is a manual quote. I need to prove it. I need to approve in my level, put in the comments that is a spare. That decision has been approved by deal desk so why we set the bar If there is a standard price it should be defined in the system then the disti should just issue it quote and it is good and this is approved. If the disti is right is what we re here why should we go through 25 people to approve a 1000 dollar quote because sometimes it's easier to 2020 with low value you need to order

Interviewee: Yeah it does. And that's one example of many cases that we hear all over regions and territories.

Interviewee: yes or if we receive an order, that is just a change in our item or we need to go through the process again or re submit and that's that's wrong. That's that's painful.

Interviewee: Yeah definitely a lot of. Let's go now to the opposite. What are the requirements do you think a system would not be able to solve?

Interviewee: I mean for sure a high seen strategy. I believe the NSP process for me with. So it's not on on large large deal but the NSP process that has been put in place by Christian about the slide deck and the business just to see cash and competitive analysis, enterprises. to Get a plan form is a good process.

Interviewee: Great.

Interviewee: So I don't see this being any place by the system

Interviewer: Okay so you need human interaction to complete this process.

Interviewee: Yes.

Interviewer: If you can see if you can create a system which your administrative task will be done under a ruling by an automated system so you can get away from the administrative task and you will have more time to face these other tasks where you need human interaction. Do you think that that will increase the effectiveness of the sales organization?

Interviewee: Oh yeah absolutely. If we can have a system that allowed to manage the online business in order to manage all the minor change on a quote day to day interaction with the distri. Yes, it will save me time for my other tasks that's for sure.

Interviewer: Yeah and what tasks. Would you what would you do would you put under the this automated system these are all administrative tasks. Or will you also put some of you of the back-office tasks that you have.

Interviewee: So again, automatic quote for frame agreement customers, if you have a repeat order, you know when the same conditions apply, so why should we go through the whole process again. Let's say you win a contract for PA 5020 and 2 months later you have the same order, you need to go through the same process, it should be all automatic. That is the task I have in mind now and then as I mentioned all the staff around split, revenue recognition, should be done by the system and not by the sales person, because this is the case at the moment.

Interviewer: That is actually one of the points we want to enhance and that is why we maybe want to have another position not so much reactive but pro active, so following that line of thought, what kind of insight of information would the back office give you to close a deal easily or to manage your account easily what would you expect?

Interviewee: So again I mentioned, the repetitive order and that is where the system will add more automation, I do not have other, other ideas, honestly because maybe I am asking the team to manage my quota then I am in touch with the tools for all the forecast process, and expect for the fact that we have 2 tools, but if you simplify or unify in a single system that would help me and honestly as I mentioned recognition. Maybe there is another area I haven spoke about is the view of your account across different regions and worldwide, so the whole communication specially when we win a project If I want to distribute to different local reps it is not easy, I do not have for instance a simple bottom that just say send an email to the extended teams so all the sales reps assigned to my account. So I need to copy past and it takes me 30 min to write just an email to distribute to the account team. So this is something that would be very useful for me because I have more possibility in terms of vision, so I can manage better my account, because I mean the business need to be communicative and the whole initiative to communicate to all account managers the terms of accounts worldwide. That is all from my side.





Interviewer: That is a really nice idea actually, SFDC and Einstein analytics are the tools we used the most, and they give us a complete view of all the accounts and all the opportunities that are opened. Or closed of year or quarter, so basically, we have an overview of all the business, and we can zoom in into different countries we can zoom in into different accounts. We can see the data from different points of view. Do you think that you would improve your work if we might send you tailor made reports?

Interviewee: yeah absolutely, that would be very good for sure, all the analytics, so I know we have some insights, so we received some emails. Some marketing data, and so on, maybe the challenge is to order the information, so we do not miss it, but yes definitely the information about all opportunities. Having a dashboard would be very useful. And the support from the analytics would be very useful. For sure.

## Annex II Process As-Is Responsibilities & Contacts



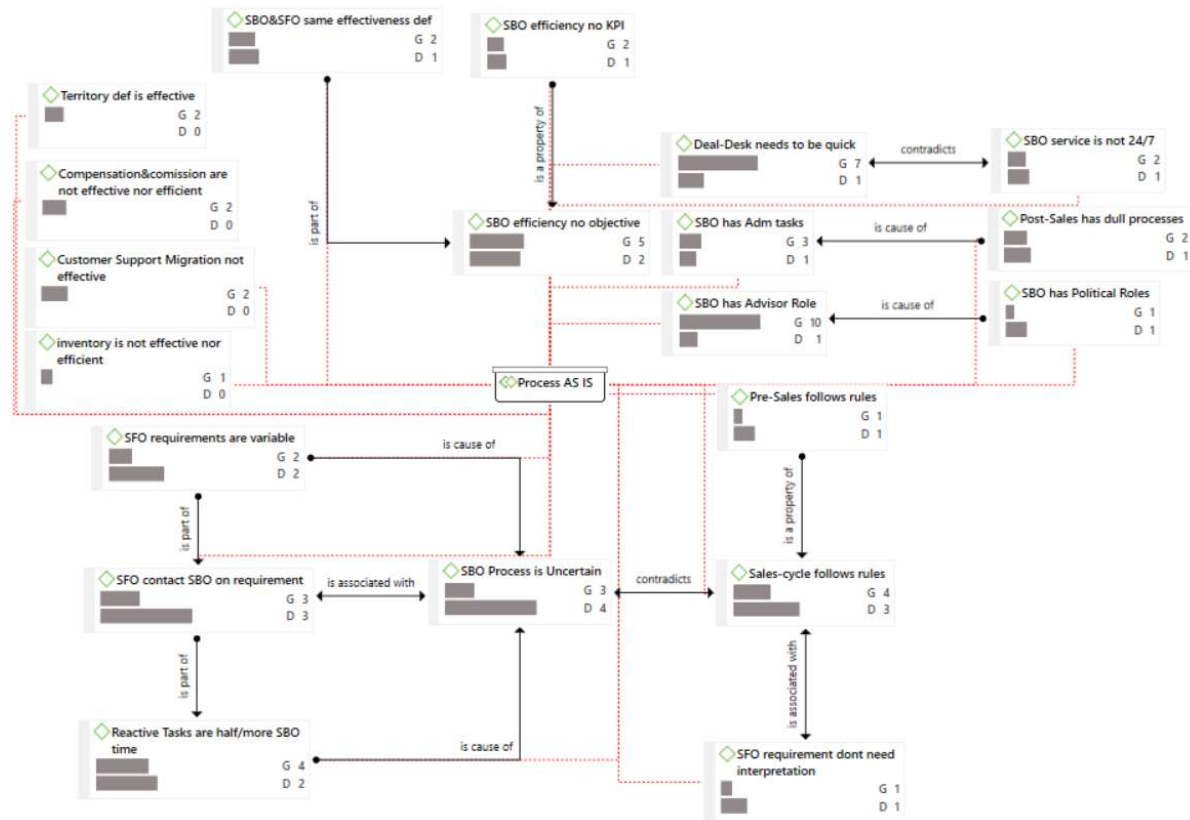
# Process As-Is Description

 <p><b>Exclusive symbol</b> - Evaluates the state of the business process and, based on the condition, breaks the flow into one or more mutually exclusive paths. For example, one report will be written if a supervisor grants approval; no report will be generated if the supervisor withholds approval.</p>	 <p><b>Parallel symbol</b> - Differs from other gateways because it's not dependent on conditions or events. Instead, parallel gateways are used to represent two concurrent tasks in a business flow. An example is a marketing department generating new sales leads and contacting existing leads at the same time.</p>
 <p><b>Inclusive symbol</b> - Breaks the process flow into one or more flows. For example, an inclusive gateway could involve business actions taken based on survey results. One process may be triggered if the consumer is satisfied with Product A. Another flow is triggered when the consumer indicates that they are satisfied with product B, and a third process is triggered if they aren't satisfied with A.</p>	<p>Swimlanes are used to organize aspects of a process in a BPMN diagram. Swimlanes visually group objects into lanes, with each aspect of the process added to a separate lane. These elements can be arranged either horizontally or vertically. Swimlanes not only organize activities into separate categories, they can reveal delays, inefficiencies, and the workers responsible for each step in a process.</p> 

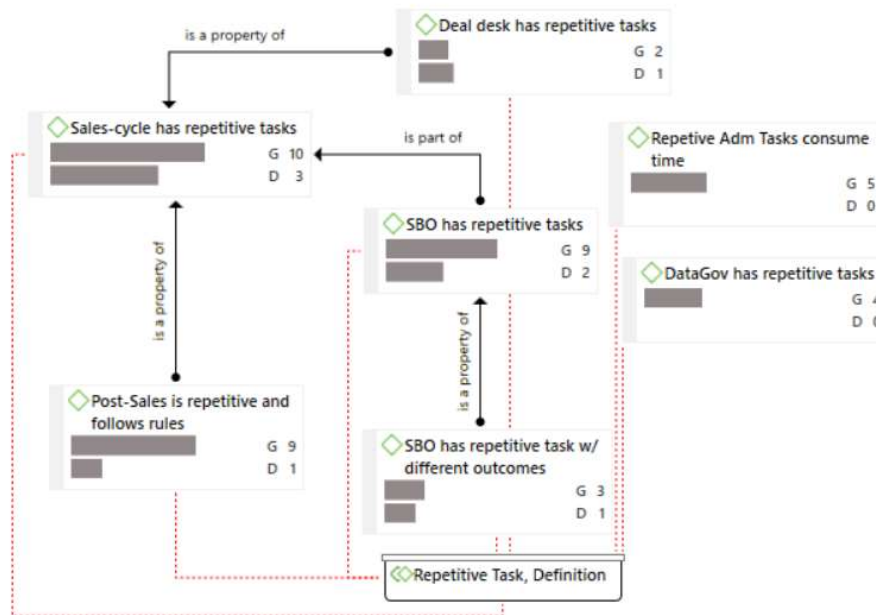
Information extracted from <https://www.lucidchart.com/pages/bpmn-symbols-explained>

### Annex III. Interview Analysis

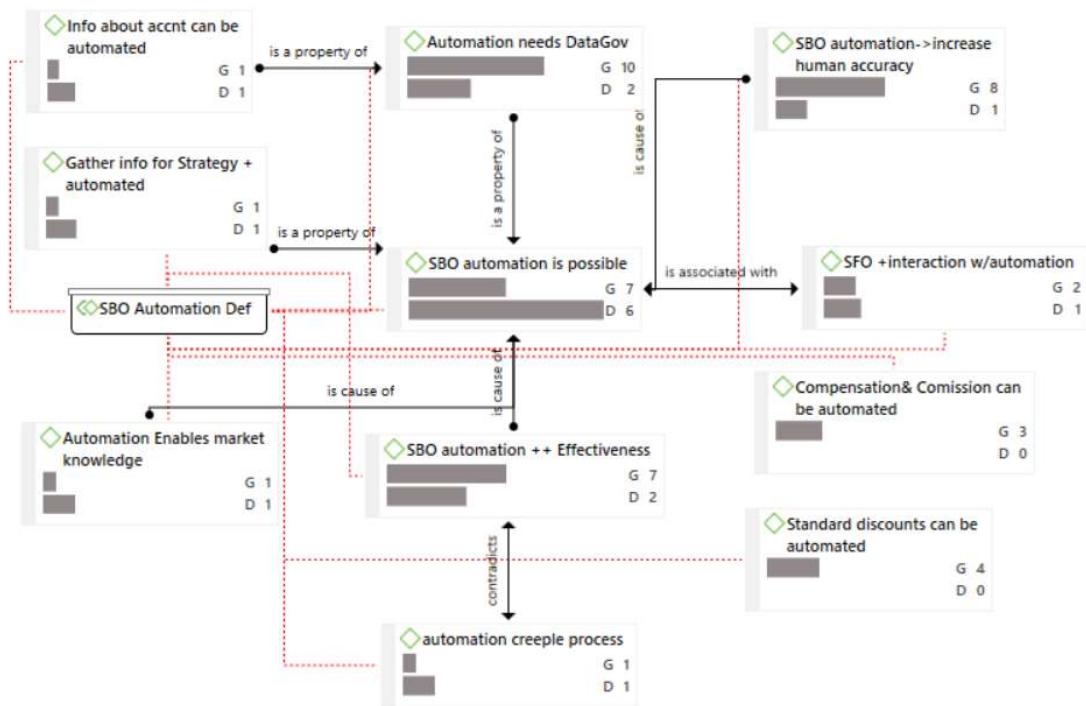
#### Mind Map: Concept Process As-Is



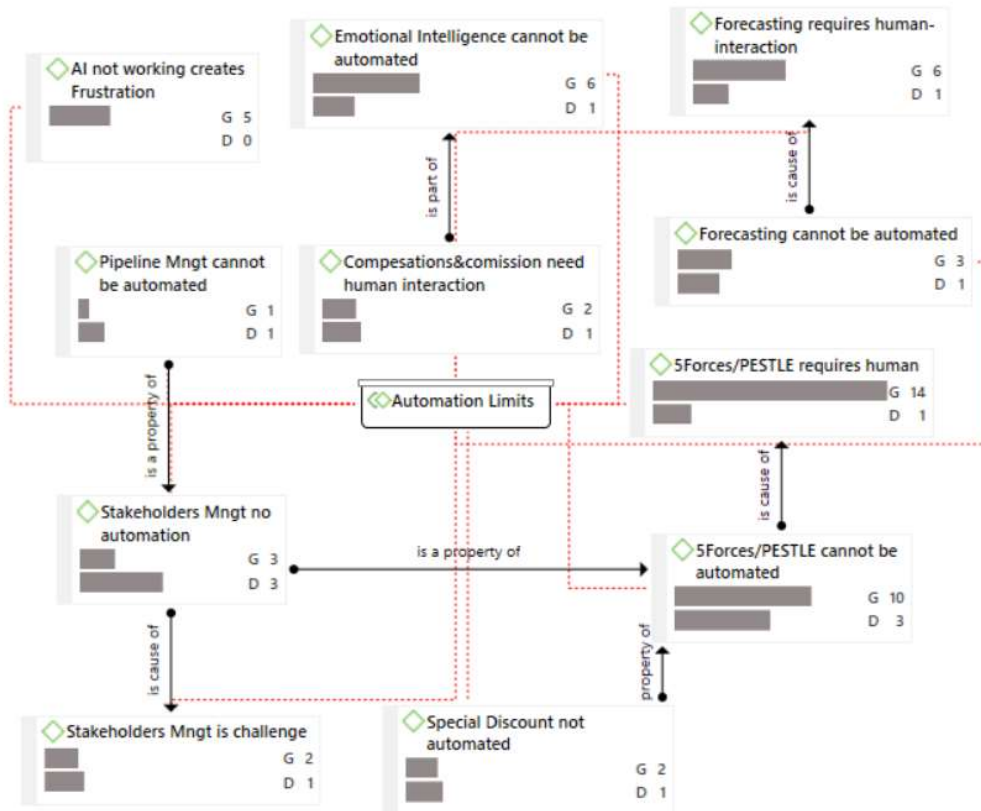
#### Mind Map: Concept Repetitive task definition



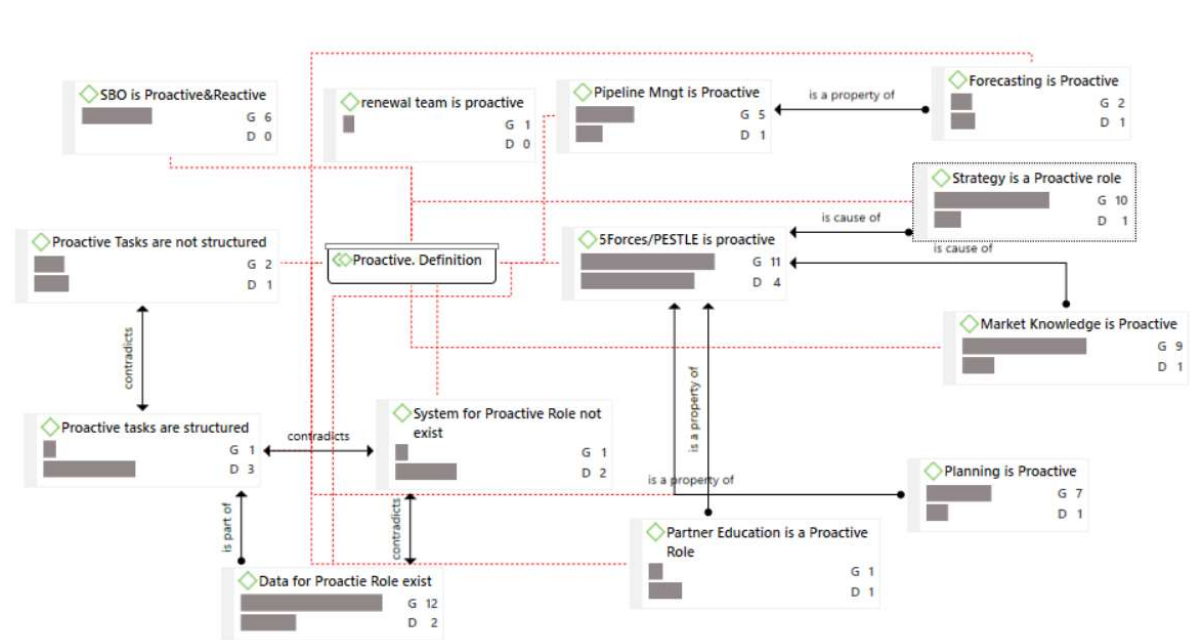
# Mind Map: Concept SBO Automation definition



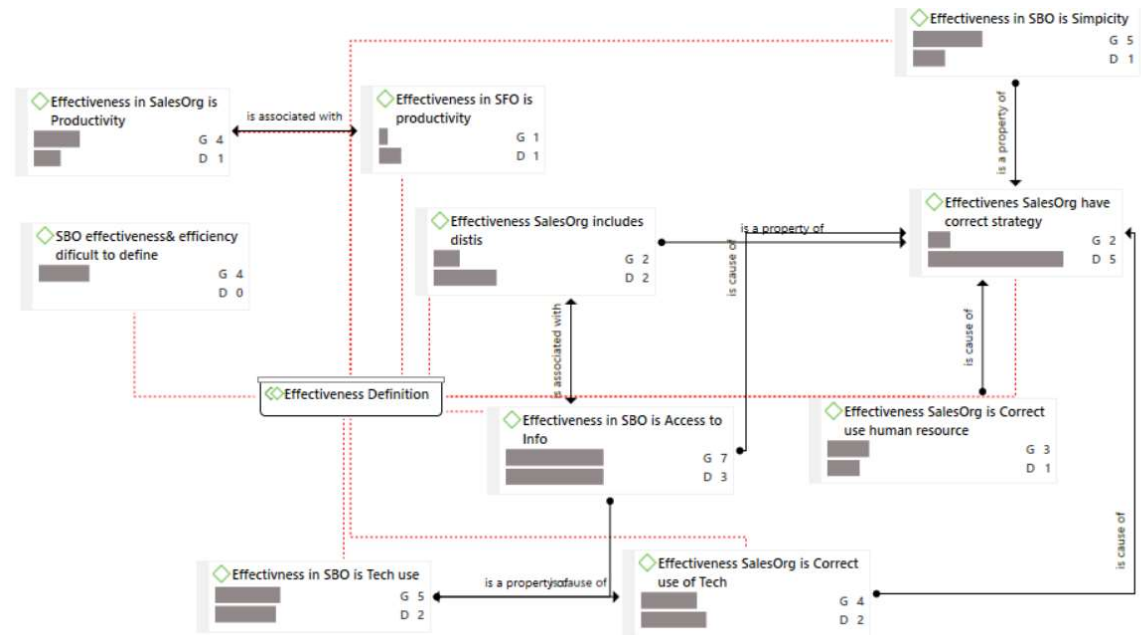
# Mind Map: Concept Automation Limits



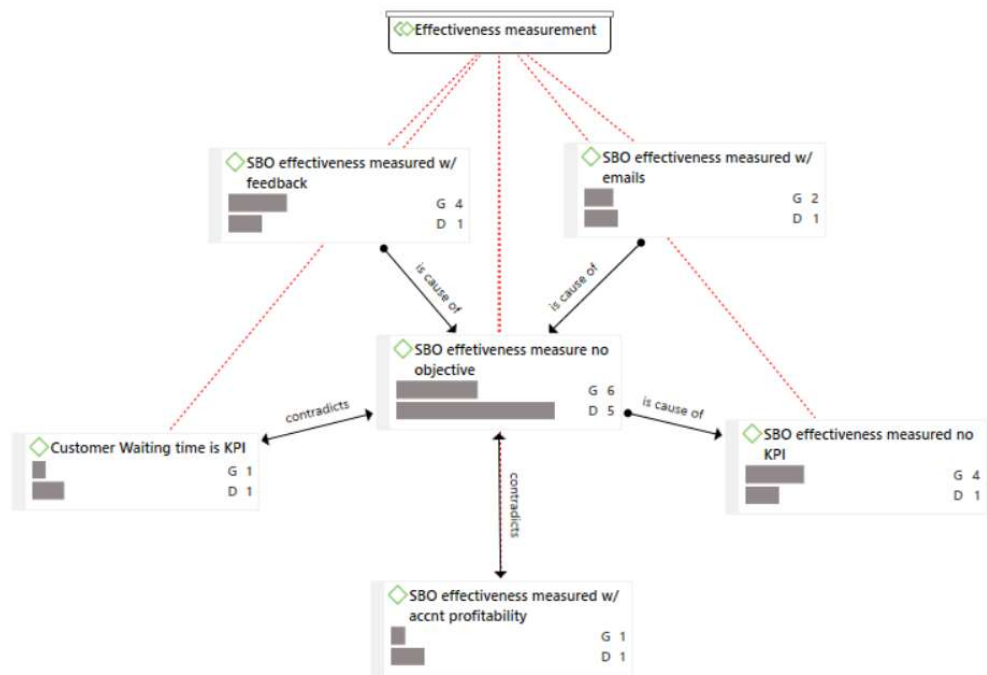
Mind Map: Concept Proactive Definition



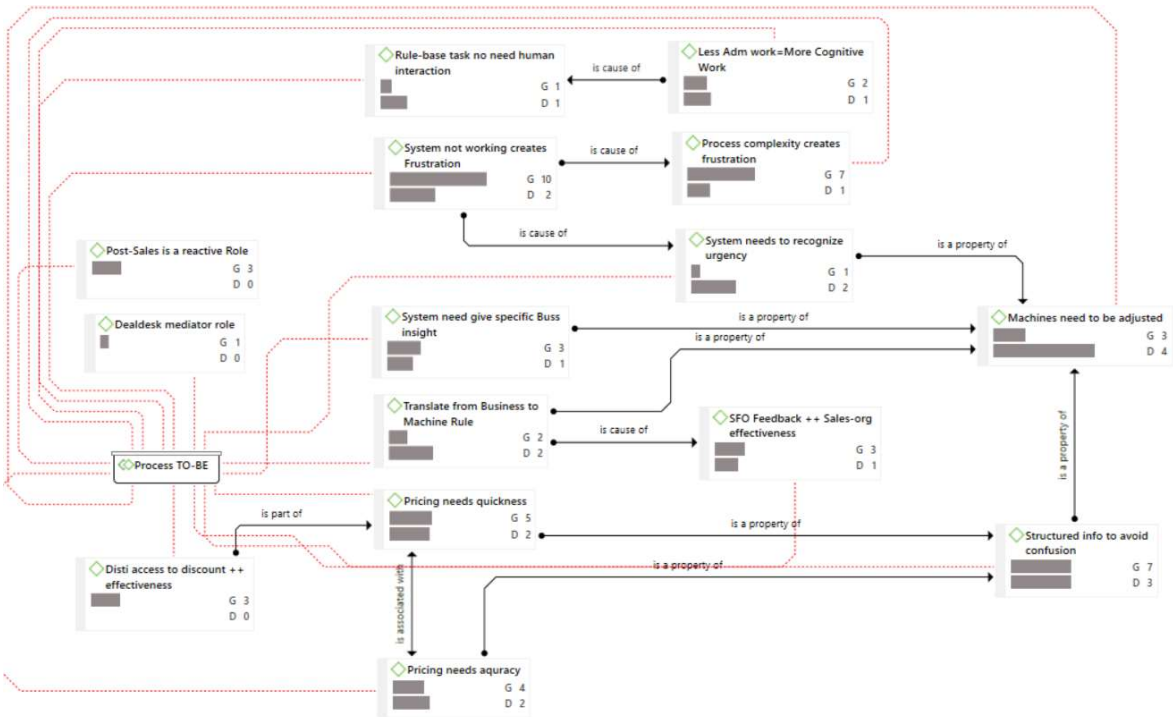
Mind Map: Concept Effectiveness Definition



Mind Map: Concept Effectiveness Measurement



Mind Map: Concept Process To-Be



## Annex IV. Iterations