

Premium Service 360° Workforce Reporting

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Master's Thesis

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Masters in Industrial Engineering and Management

2020-06-28

Abstract

The present dissertation was developed within the Premium Service team, an operational team inside Farfetch's Customer Excellence department, with the main objective of bringing more and better information to the Workforce Optimization (WFO) team, a support team to the operational teams. As the luxury e-commerce market starts to get more and more competitive, the quest for luxury and premium services is increasing. Hence, it is of primary importance to create the most accurate reporting tools, in order for the WFO team to support in the best way possible the Premium Service team, by enhancing their performance and making the Premium Service team provide the best service to the premium clients.

Firstly, an analysis on how the Premium Service team was working was performed, mapping all the agents' scope of actions. After that, and having understood the way the team performed its tasks, the process of moving from business process to business intelligence started.

Several lines of action were created: A categorization revamp was put in place, in order to standardize the cases categorization and to correct some deviated analysis results. This new categorization, improved the WFO team analysis on the category and subcategory levels; New metrics were created to measure manual tasks, that had not been measured so far, bringing more information on the agents work and feeding the Workforce Management (WFM) cycle for the WFO team to have better results and continuously improve them; Finally, some metrics were reviewed to translate the business processes into business intelligence through key dashboards. A daily dashboard and a 360° Workforce Reporting Dashboard were built.

With the new tools, the WFO team has now more information on their side in order to support the Premium Service team. The stakeholders of the dashboards, namely the Premium Service team and the WFO team, are offered the chance to have better insights on the team and on the business overall performance, as well as the possibility to perform root-cause analysis.

Resumo

Controlo 360° das atividades de uma equipa de serviços premium na indústria de luxo online

O presente relatório de dissertação foi desenvolvido junto da equipa de *Premium Service*, uma equipa operacional dentro do departamento de *Customer Excellence* da Farfetch, com o objetivo principal de trazer mais e melhor informação para a equipa de *Workforce Optimization (WFO)*, uma equipa de suporte às equipas operacionais. Com o crescente aumento de competitividade dentro do mercado e-commerce de luxo, a busca por serviços de luxo premium é cada vez maior. Consequentemente, é fundamental criar as melhores ferramentas de "reporting", para que a equipa de *WFO* possa fornecer o melhor apoio à equipa de *Premium Service*, melhorando a sua performance e permitindo que esta forneça o melhor serviço aos seus clientes *premium*.

Primeiramente, foi feita uma análise à forma como a equipa trabalha, tendo sido mapeadas todas as ações dos agentes. Depois disso, e tendo todos os processos da equipa mapeados iniciou-se o processo de transição de *business processes* para *business intelligence*.

Várias linhas de ação foram criadas: Foi feita uma revisão da forma como os casos eram categorizados de modo a uniformizar essa categorização e consequentemente corrigir alguns desvios nas análises que a equipa de *WFO* fazia e que as tinham por base; Foram criadas métricas de modo a dar visibilidade sobre as tarefas manuais desempenhadas pelos agentes que nunca tinham sido medidas anteriormente. Estas métricas trazem mais informação para a equipa de *WFO*, alimentando com melhor informação o ciclo de trabalho da equipa e permitindo melhores resultados, seguindo a filosofia de melhoria continua. Finalmente, algumas das métricas existentes foram revistas e juntamente com as novas, foram criados dashboards, de modo a traduzir os *business processes* em *business intelligence*. Um dashboard diário e um dashboard de monitorização 360° da *workforce* foram construídos.

Com as novas ferramentas construídas, a equipa de *WFO* tem agora mais e melhor informação disponível do seu lado para apoiar a equipa de *Premium Service*. Todos os utilizadores dos dashboards, nomeadamente a equipa de *Premium Service* e a equipa de *WFO*, têm não só a oportunidade de ter uma melhor perceção sobre a performance da equipa e do negócio em geral, mas também de efetuar análises mais detalhadas, e descobrir a raíz de possíveis problemas.

Acknowledgements

Firstly, I would like to thank everyone at Farfetch with whom I had the chance to work, namely the people from the WFO and the Premium Service team. They have supported me throughout my project and helped me grow both professional and personally.

Secondly, to my supervisors, Professor Teresa Bianchi de Aguiar and João Santos, for the time, patience, support and precious inputs, always guiding me in the right direction with wise words.

Last, but not least, I would like to thank my parents, my girlfriend and my sister, for always believing in me and supporting me through this journey. Without the support of each an everyone of them, I would certainly not be where I am today. Thank you.

"In God we trust, all others bring data."

W. Edwards Deming

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Acronyms and Symbols

KPI	Key Performance Indicator
RR	Response Rate
CRM	Customer Relationship Management
WFO	Workforce Optimization
WFM	Workforce Management
FRT	Full Resolution Time
SLA	Service Level Agreement
CE	Customer Excellence
CS	Customer Service
DS	Delivery Support
PS	Partner Service
CCC	Customer Compensation Control
BPM	Business Process Management
ETL	Extract Transform and Load
OLTP	Online Transaction Processing
BI	Business Intelligence
ME	Middle East
JP	Japan
EN	English

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Chapter 1

Introduction

The online commerce market has been one of the hottest topics for luxury brands in the last few years. This trend is mainly driven by the technological evolution of the internet, and the new generations of customers 'Digital Natives' who are technologically more developed and look forward to a worldwide integrated digital access to (luxury) goods. Digital is now the engine of the luxury shopping experience (Catena and Remy, 2015).

These facts have pushed brands and boutiques to a new way of thinking the business. That is what José Neves saw back in 2008 and that is why Farfetch exists, "to be the global technology platform for luxury fashion, connecting creators, curators and consumers".

This dissertation project was developed within the Workforce Optimization (WFO) team and aims to develop a model for managing, measuring and controlling the activities of the Premium Service team, one of the teams inside the structure of Customer Excellence (CE), through the development of a reporting system. Farfetch has the goal of providing a luxury experience when the customer contacts the company. Bearing that in mind, when it is servicing Premium Clients, the requirement level is even higher. Hence, optimizing the workforce plays a central role in serving the clients accordingly.

In Farfetch's CE, the goal is to provide a holistic support to the customer, having only one point of contact and managing as quick as possible. This transversality through the entire CE requires the use of different tools and the work in different types of tasks, making the process of monitoring KPIs complex and far from complete.

1.1 Farfetch

Farfetch is the global platform for luxury fashion that links consumers with a global network of boutiques and brands. It was launched in 2008 by José Neves and has its headquarters in London. Currently it has a global network of more than 1000 partners and operates globally serving more than 190 countries. Being a global platform, Farfetch can be divided in two main business areas, The Farfetch Marketplace and The Farfetch Platform.

Farfetch has its marketplace 'farfetch.com', where most of businesses happen, therefore it is the core business of the company. The business model is based on customers buying products on the website that are owned by the partners. Farfetch is the intermediate, that bridges customers and partners, offering partners an online channel to sell products, and offering clients the possibility to buy products from anywhere in the world.

Besides the marketplace, and with its mission of becoming the global technological platform for luxury fashion in mind, Farfetch operates a modular end-to-end platform which aims to connect the luxury fashion ecosystem worldwide (Farfetch, 2020). The platform is a single operational system created to address the complex demand of consumers and luxury sellers, providing the foundations for the three main components: applications, services and data.

The two main participants in this business model are the customers and the partners, both with different paths when doing business with Farfetch. On one hand the customers explore the products available at the marketplace, order the ones they want and finally receive them. On the other hand the partners prepare the season catalogue, wait for the customers orders, ship them, and then their performance is analyzed. During these paths there are many contacts established both by customers and partners with Farfetch. Those issues or problems are handled inside Farfetch by the CE department.

CE is a department of service teams, that works as a whole to serve the customers every time they contact the company. It accounts for more than 600 people spread through 9 different countries. Inside this department there are 5 different operational teams, Customer Service (CS), Premium Service, Partner Service (PS), Customer Operations (Delivery Support (DS) and Customer Compensation Control (CCC)), and Partner Success as shown in Figure 1.1.

1.2 Customer Excellence at Farfetch



Figure 1.1: Customer Excellence structure

On one hand there is CS, the team that interfaces directly with customers, on the other hand there is Partner Service, that handles requests and finds solutions for brands and boutiques. In between there are all the other operational teams that work as a whole to fulfill both the clients' and partners' needs. Premium service supports the Private Client stylists, who directly interact with the customers, Customer Operations provides services to customers and partners in DS and CCC, and Partner Success trains the partners and monitors its performance.

Furthermore, the service support is provided by two additional teams:

- **Service Design** - the team that seeks to improve the CE services to create an ideal customer journey when contacting Farfetch;
- **Workforce Optimization (WFO)** - the team that is responsible for scheduling, planning and making the teams performance as effective and as efficient as possible.

1.2.1 Workforce Optimization team (WFO)

The WFO team has the main goal of supporting the CE teams, providing the foundations for those teams to work on. The mission of the team is "efficiency and scalability enablement with predictive and accurate planning for CE workforce".

This mission is achieved through the effort and commitment of 5 different teams inside the WFO team. The budget planning team is responsible for managing the CE teams budget, through financial control frameworks, return on investment analysis and comparisons between control budget and actuals. The Forecast and Planning team provides the forecast, based on past data and assumptions, as well as the headcount for budget and recruitment. The scheduling and real time management team converts the long term forecast in short term planning, controls the shrinkage and supports the day to day operations with insights to maximize efficiency and improve business results. The reporting and analytics team creates reporting and data structure, develops and builds reporting for all CE teams and runs analyses to identify trends and how to support efficiency and scalability. The main goal of this team is to inform CE whether they are going on the right track or not. The data collected and analysed by this team will serve as an input for the forecasting process, connecting the overall Workforce Management (WFM) cycle. This cycle represents the internal continuous improvement philosophy that the team is implementing. Lastly the development team develops workforce solutions to enable better business outcomes, through innovation projects and discovery sessions. This team is transversal to all the others, Figure 1.2 shows how these teams connect to form the WFM cycle used by the WFO team. They are present in 4 different offices, Porto, Lisbon, Shanghai and Los Angeles, with a total of 28 people.

1.2.2 Premium Service team

The Premium Service Team is a very recent team as it was created only in September 2018. This team belongs to the CE department and its purpose is to serve the clients that belong to the FF-Access-Private-Client tier. The FF-Access-Private-Client is the highest tier on Farfetch's loyalty

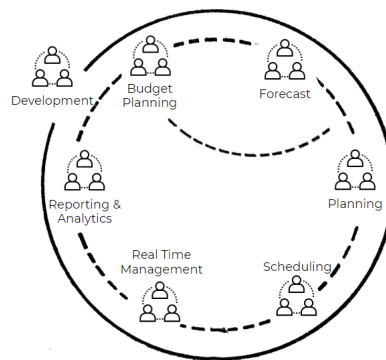


Figure 1.2: WFO team working cycle

program and this clients have personal stylists assigned to them, and the customers of Premium Service are the stylists. Premium Service does not have direct contact with the client. Some FF-Access-Private-Client clients do not have a personal stylist, therefore they have to contact CS, and if necessary CS creates a case to Premium Service.

Back when the Premium Service team did not exist, stylists had a lot of difficulties solving operational problems of their clients, mainly because they were, and still are, focused on the commercial and fashion side of the business and do not know, nor understand the operational side of Farfetch. The stylists did not have a contact point inside Farfetch where they could reach to clarify a doubt or to solve a client's problem. Premium emerged with the goal of bridging this gap in order to reinforce a premium service provided to FF-Access-Private-Client clients.

The team intends to support the stylists' day to day operational needs, in a set of different problems such as item creation, payments, delivery, and customer service. This allows stylists to focus on styling and gathering new clients. The Premium Service team provides global 24/7 support and its mission is to be the 'rock' for the Private Client service (stylists), by globally supporting their daily operational processes. That way, together, they can offer the best and most luxurious service in the luxury fashion world.

The team is spread between 3 different countries: Portugal (12 agents), China (4 agents) and United States (1 agent). Furthermore, there are two hybrid agents, one in Middle East and one in Japan, that divide their work between CS and Premium Service.

1.3 Project

1.3.1 Motivation

Initially the Premium Service Team was scaled based on the goal of fulfilling a premium service level agreement but the efficiency was kept aside. The WFM team does not have full information about the Premium Service agents activities, and whether the workforce is well dimensioned, or even if it is being efficient or not.

The Premium Service team has two different sources of work. One is the case management that is directly related to Salesforce, an integrated Customer Relationship Management (CRM) solution. Every time a stylist contacts premium services, a new case is created and the agents have to open the case, handle it and solve it. There is a lot of information that can be extracted in terms of workforce reporting directly from Salesforce.

The other work source is the proactive files. In order to deliver a premium service to all of its clients, the Premium Service team tries to anticipate every possible problem, analysing the status of open orders in proactive files. That source of work is not being measured currently. The WFO team has no visibility upon this proactive work performed by the agents.

In conclusion, the information that the WFO team can gather about Premium Services, is much related to the performance towards the customers, through the CRM Salesforce. Some of the metrics that the team evaluates weekly are: response rate, backlog, workload, full resolution time, forecast accuracy, contacts per order, number of interactions, top categories.

This project was designed to find more information about the activities of the Premium Service agents, to have a feeling about the efficiency or inefficiency of the team, and to control and monitor their activities. The main goal is to be able to extract better information about the Premium Service team activities and to find efficiency enhancement opportunities both for the Premium Service team and for the WFO team.

In relation to the Premium Service team, new ways of performing tasks can be implemented to enhance performance. The process of monitoring and controlling performance will allow the team managers to better understand the impact of the activities performed, and will allow the team to keep on track in terms of efficiency, whilst achieving their goals of quickly attending the customers needs, both on a team and on an individual level. In terms of the WFO team, the more information about the Premium Service team, the better the WFM cycle will be performed. Besides that, cost efficiencies can be obtained through the analysis of the Premium Service team. That will enhance the performance of the WFO team since it is their job to budget the CE teams.

1.3.2 Goals

For the WFO team, it is of key importance to create routines to measure and keep the success of CE, hence this project will allow the team to have better insights into one of those teams, the Premium Service team. The main goal of this project is to get more and better information on the Premium Service team so that the WFO team is able to correctly analyse and give the necessary and useful tips to make Premium Service as efficient as possible.

That main goal can be outlined on these points:

- **Mapping the scope of the agents actions:** Through the daily monitoring of the team work, the agent activities will be mapped so that a better visibility towards the team is achieved.
- **Creation of a 360° performance monitor:** developing new KPIs and fine tuning the ones that already exist, to develop a monitoring dashboard. Once the processes are mapped, it

will be necessary to define metrics to monitor the performance of those processes, so that a monitoring dashboard is created.

Once the dashboard is concluded, the performance should be analyzed and efficiency improvement opportunities should be found.

1.4 Methodology

The project was divided in 2 major phases. The first one had the purpose of understanding the day to day activities of the team. That involved face to face work with the agents in order to have some insights and awareness of the work performed by the team. That led to the mapping of the main processes, which represents the full understanding of how the team works.

The second phase was the creation of dashboards and implementation of new/renewed metrics. In this stage, following Negash S. (2008)’s path from business processes to business intelligence, the goal was to measure all the processes previously mapped, in order to bring that information to the Premium Service team and the WFO team. It started with an analysis of what was the current state in terms of metrics, what was being measured and what was not. Through this analysis several processes were found to be unknown to the WFO team and therefore not measured. Different metrics were developed and those processes started to be measured. The final step of this phase was to create a dashboard based on Archambault et al. (2015) good practices, that translated all those metrics into useful information. The Figure 1.3 shows the activities performed throughout the project.

Document

Phases	Week number													
	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1-Introduction	█	█	█											
2- Theoretical background	█	█	█	█	█	█	█							
3 - Initial team's Status	█	█	█	█	█	█	█							
4 - Project Implementation							█	█	█	█	█	█	█	
5- Conclusion and Future Work													█	
Document Review													█	█

Project

Phases	Week number													
	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 - Current team's status	█	█	█	█	█	█	█							
1.1 - day to day work with the Premium Service team	█	█	█	█	█	█	█							
1.2 - Processes mapping	█	█	█	█	█	█	█							
2 - New metrics and dashboards implementation							█	█	█	█	█	█		
2.1 - Metrics creation/reformulation							█	█	█					
2.2 - Dashboard creation							█	█	█					

Figure 1.3: Project schedule

1.5 Dissertation's structure

This dissertation report was outlined in 5 different chapters as follows:

In Chapter 1 it is presented the introduction of the project, the description of the company and the stakeholders of the project (teams), as well as the motivation, main goals and the methodology used to achieve them.

In Chapter 2 the state of the art is described, a literature review is performed and several studies are used as a theoretical framework to support the project. Research on different areas such as luxury e-commerce, luxury customers, KPIs, workforce reporting, dashboards, was performed.

Chapter 3 describes the status of the Premium Service team as it was in the beginning of the project. It was crucial to understand how the team worked, to map the scope of action of the agents and the processes of the team so that changes could be applied and efficiencies obtained.

In Chapter 4 the implementation process is described and the outcome results are presented and discussed. It is presented how the new metrics were achieved, what was the rationale behind the dashboards construction, and what were the main implemented changes.

Chapter 5 presents the conclusions of the current dissertation project and the key takeaways in terms of knowledge to be used in the upcoming projects.

Chapter 2

Theoretical Background

The current chapter aims to provide a literature review on the main topics of interest applied during the course of this project. Firstly, an overview of the Luxury E-commerce market will be presented. Secondly, the role of workforce management is explained followed by the section that explains the importance of process mapping and how it connects directly with KPIs and Dashboards.

2.1 Luxury E-commerce

In today's digital-centric era, the way businesses are being done throughout every industry has changed, with the development of information technologies, e-commerce has been revolutionized (Mu et al., 2020). The internet has become an imperative commerce transaction platform for businesses (Kim, 2019). The luxury e-commerce market is one of the markets that has developed the most within this internet rapid change. In fact online sales growth has outperformed offline sales growth and many luxury firms are successfully adopting online sales (Mu et al., 2020).

A luxury brand was defined by Heine (2012) as a high level of quality, aesthetics, price, rarity, extraordinariness and a high degree of non-functional associations. As per Vigneron and Johnson (2004), the six characteristics of a luxury brand are: perceived conspicuousness, perceived uniqueness, perceived extended self, perceived hedonism and perceived quality. Several definitions proposed by multiple authors can be used to define luxury, nevertheless most authors agree that the core characteristics included in the luxury definition are high level of quality, premium price, exclusivity and craftsmanship (Kim, 2019).

In the luxury market, consumers perceive quality as a brand determinant (Husic and Cicic, 2009), not only the quality of the product, but also the quality of the service.

The technological evolution of the last decades was responsible for the change of mindset that happened in the luxury market. In fact, luxury consumers' shopping behaviour has switched from offline sales to online sales. Luxury consumers have considerable disposable income, but have limited time for shopping, thus fostering the growth of the luxury e-commerce (Kim, 2019).

2.2 Workforce Management

In modern global organizations, Workforce Management became a core element with a pivotal role in all the operational and decision activities (Cimitile et al., 2012). Workforce Management has emerged as the answer to promote competitive advantage, ensuring sustainable organisational performance (Nienaber and Sewdass, 2016). This has an increased importance in service based companies. In fact, Workforce Management is one of the most important factors for the success of any company that provides services to its customers (Kassem et al., 2012). It is aligned with the company's mission, goals and objectives and allows the analysis of the present workforce helping to determine the future requirements (An et al., 2007).

In order to understand the process of Workforce Management, it is fundamental to answer two simple questions, "What?" and "How?". The first one is answered through the definition of the Workforce Management's mission. As per Kassem et al. (2012) the general mission is to divide human resources among the existing workload. And the means to achieve that division is by dividing the process into two different stages, which are workforce planning and workforce scheduling. These two phases constitute the workforce management process and guarantee the utilization of resources in the most efficient way possible. Many authors define these as the main Workforce Management phases, although there can be more, resulting from the division of these phases into smaller and more specific ones.

Workforce planning involves predicting the amount of demand that the company will face and matching it with the resources available in order to produce a plan for a certain period of time (Kassem et al., 2012). This stage can be further divided in two different tasks: forecasting, that responds to the necessity of predicting the demand, and planning, where the workforce is distributed among the demand (workload) that was previously predicted on the forecasting activity.

In the planning phase, decisions concerning how many employees to hire, how many to dedicate to each unit or area of the organization, and how many employees to schedule for each shift are taken (Daniel Wright et al., 2006). This resulting information will feed the next stage.

After a company has produced a workforce plan, it needs to adhere to that plan by assigning its human resources to their matching jobs based on their skills. This is called workforce scheduling. Since labor costs are a major component of the total cost of operation, efficient staff scheduling is critical (Robbins, 2007).

Part of the scheduling process is workforce assignment, the assignment of human resources to jobs. As per Ernst et al. (2004) "optimised staff schedules can provide enormous benefits, but require carefully implemented decision support systems if an organisation is to meet customer demands in a cost effective manner while satisfying requirements such as flexible workplace agreements, shift equity, staff preferences, and part-time work." The scheduling activity is critical in the Workforce Management process, not only to assign people to jobs, but also to be able to quickly adapt to any changes that may possibly occur. Several changes might take place during the day to day activities, for instance shift changes, absenteeism or demand fluctuations. In order to accommodate all this, it is necessary to make real-time adjustments. The real-time management is the second part of the

scheduling phase and makes this process complete.

The success of the Workforce Management process is highly dependent on the existing information. In order to achieve this success, proper measurement is required. To ensure the availability of the right people, at the right place, at the right time, timely and accurate information as well as intelligence is needed to make evidence-based decisions (Nienaber and Sewdass, 2016). In order to answer to this decision-making necessity, Workforce Management needs data from the organization's information systems (Cimitile et al., 2012). Hence, to complete the Workforce Management process and close the cycle it is of pivotal importance to analyse all the available data so that the most accurate information can be used to feed once again the planning phase. That is where the reporting and analytics teams enter to make sure that the planning and scheduling teams have all the data in order to make the best decisions.

This way, the big challenge of efficiently planning and managing workforce needs to be tackled in the proper manner, leveraging companies who put it in practice, especially those in the service industry (An et al., 2007).

2.3 Business Process Management

Business processes are at the heart of a company, in the sense that it is what generates value to the enterprise. Business processes can be described as what companies do whenever they provide a product or a service to its customers (Dumas et al., 2013).

Han et al. (2010) describes it as a sequence of activities that carries out a complete business goal. There is a well defined start, normally triggered by a certain event, and a set of activities/tasks that are performed to reach an end that should result in the satisfaction of the clients needs.

As per Dumas et al. (2013), events correspond to things that typically have no duration, whereas activities take time to be performed. When an activity is rather simple and can be seen as one single unit of work, it is called task. Besides tasks, activities and events, there are points during the unfolding of the process, when a decision is made, that affects the way the process is executed. Those are called decision points.

The way processes are designed and performed affects both the efficiency with which services are delivered and the "quality of service" that customers perceive (Dumas et al., 2013). Hence the need for organisations to design, monitor and evaluate the work that is performed by its resources. In other words, companies have become more aware of the importance of business processes and the company performance as a whole.

The business performance is achieved through the execution of business processes. Hence, enterprise performance measurement and business process are closely related. Given the increasing companies' concern on performance, the concept of business process management has been recently proposed in order to support business process execution (Han et al., 2010).

"Business Process Management (BPM) is the art and science of overseeing how work is performed in an organization to ensure consistent outcomes and to take advantage of improvement opportunities." (Dumas et al., 2013).

Performance enhancement can be obtained by applying the tools of BPM, as per Dumas et al. (2013) an organization can outperform another organization despite of offering similar kinds of service, by having better processes and executing them better. The means to have better processes and execute them better is BPM.

Han et al. (2010) divides the BPM cycle in three phases: diagnosis, where operational processes are analyzed to identify problems and improvement opportunities. Design, where the new processes are designed and evaluation is conducted. And execution, where business activities are continuously monitored and controlled for better performance. In a similar way Dumas et al. (2013) defines the BPM cycle as shown in Figure 2.1.

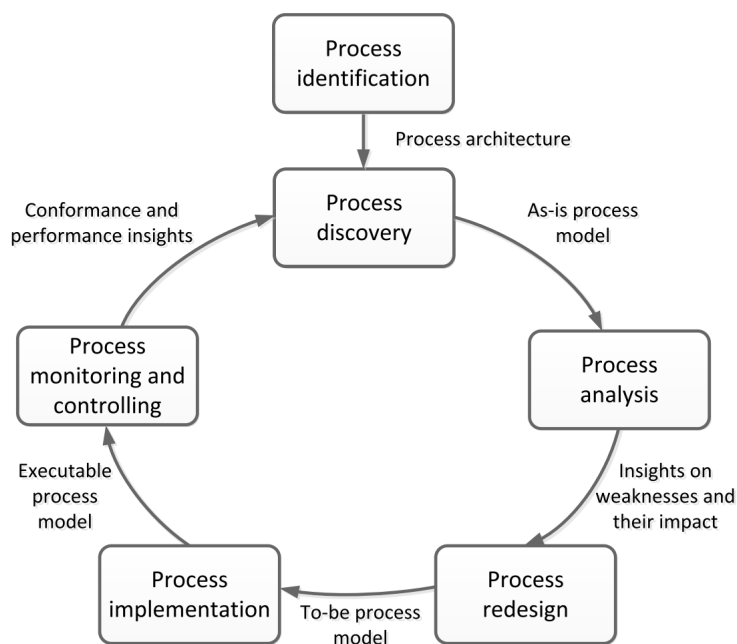


Figure 2.1: BPM Cycle (Dumas et al., 2013)

Dumas et al. (2013) says that BPM inherits from the continuous improvement philosophy of Total Quality Management, as well as the principles and techniques of operations management, Lean and Six Sigma, and combines them with the modern information technology capabilities, with the aim to perfectly align business processes with the performance goals of an organization.

2.4 From Business Processes to Business Intelligence

Performance measurement is an essential management principle. The measurement of performance is fundamental since it identifies the performance gaps between current and desired performance and provides key progress indications towards closing them (Weber and Thomas, 2005).

The monitoring and evaluation of processes are highly dependent on data, hence BPM provides a better understanding of the business by enabling communication between business analysts and

Information Technology experts (Pascalau et al., 2011). The monitoring and evaluation is one of the most important stages of the transition from business processes to business intelligence since it brings awareness about how far the organisation is from accomplishing its goals.

In this stage, key performance indicators (KPIs) are interpreted and analysed in order to evaluate and take actions to improve performance. The most important part is to define which metrics are truly relevant to evaluate the specific process. (Faria, 2019)

The only way to assess the performance of a company is through data analysis, but data for itself is just information, so it is essential to translate the information gathered in KPIs that make sense to the company and to the business, transforming the information in intelligent information. (Faria, 2019)

2.4.1 Business Intelligence

Business intelligence (BI) systems can be defined as a data driven decision support system focused on the treatment of large volumes of data in data warehouses. These systems combine data gathering, data storage, data visualization and knowledge management supported by analysts that evaluate information, to improve the quality of the input to the decision process (Negash S., 2008).

As per Negash S. (2008) a typical BI process consists of 5 key phases: data sourcing, where data is extracted from several data sources. Data analysis, where data is converted in knowledge through reporting, modelling visualization and data mining. Situation Awareness, where a deep understanding of the current decision situation is obtained. Risk assessment, where threats and opportunities are evaluated. And finally decision support, which the ultimate goal is to help managers make decisions wisely, based on the current business data.

It is only possible to evaluate performance metrics if there is data available, and as a means to have data available there is the need for a BI system that has the goal of extracting, storing and retrieving data for business analysis applications (Negash S., 2008). The typical BI system is shown in Figure 2.2

The operational systems which support daily business operations are the BI systems data sources. The Online Transaction Processing (OLTP) systems generate huge amounts of data. That data is pre-processed at the data acquisition level. Data is extracted by the Extract Transform Load process (ETL) and then a set of transformation rules, cleans, unifies and aggregates data that can finally be loaded to the central data warehouse. Data acquisition is the most important level of a BI system because ETL is responsible for data quality of all other components. Finally, based on the data warehouse, several kinds of applications are developed intending to transform data into knowledge. The metadata management level controls the overall system, such as data warehouse storage, data sources, access authorizations and business rules. At this level it is also defined how different data is extracted and transformed. Metadata has a critical role in producing accurate and consistent information, and managing the system maintenance (Negash S., 2008).

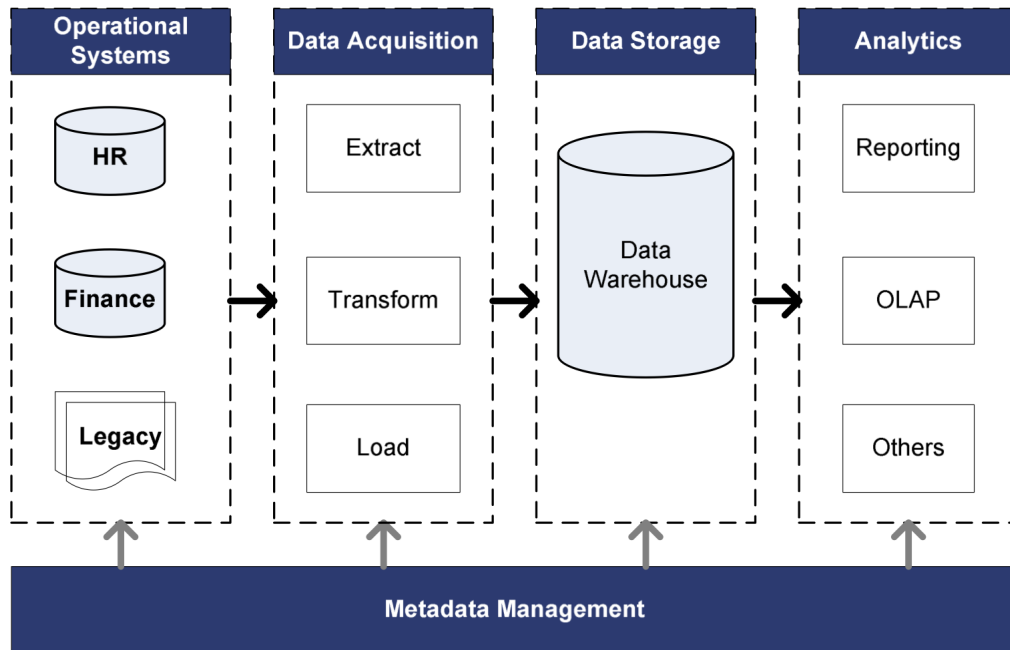


Figure 2.2: The General Architecture of Current Business Intelligence Systems (Negash S., 2008)

2.4.2 Key Performance Indicators (KPIs)

Once the processes go live, it is essential to monitor its performance. For that, the relevant KPIs must be defined and targets must be set for those KPIs. Finally an assessment of the results obtained is performed and the necessary adjustments are made in the process. (Faria, 2019)

KPIs are defined to assess the efficiency and effectiveness of a company's key business objectives. Hence, when monitoring businesses processes, it is of pivotal importance to correctly define KPIs for the purpose of extracting the best information possible from this monitoring activity and consequently find the best improvement opportunities. Carefully selected KPIs lead to a correct evaluation of the status of the business process, thus identifying precisely where to take action to improve performance (Weber and Thomas, 2005).

The KPIs should be used at all levels of an organisation aiming to assess whether the organization's goal is achieved (Ishak et al., 2019).

Ishak et al. (2019) defines the relevance of performance indicators based on the SMART concept. In order for a KPI to be useful it should be Specific, Measurable, Attainable, Relevant, and Time-bounded. Besides that, KPIs should also be aligned with the goals and the strategy. Thus, each organisation and department will use different KPIs to measure its performance success, according to the goals previously set.

Most of the times the KPIs targets are service level agreements (SLA) between the organisation and its customers. (Faria, 2019)

SLAs are established through a contract between the service consumer and the service provider,

where the service quality and behaviour expectations are defined in the form of service level objectives attached to the corresponding KPI, that guarantees the specific values of service level (targets) (Wetzstein et al., 2008).

There are several frameworks in the literature regarding the division of KPIs in different areas according to its use and utility. As per Ganesan and Paturi (2009), a KPI can be classified either as leading or lagging indicator. Lagging indicators are mostly financial metrics that represent the results of actions that have already been taken in the past. Whereas the leading indicators are metrics that can be acted upon and that can impact the performance of the organization in the future.

Other authors prefer to classify the KPIs as efficiency indicators or effectiveness indicators. Efficiency can be described as the relationship between the resources used and the results obtained. It is closely related with costs, the least the cost, the more efficient the process is. Whereas effectiveness is more related to quality in the sense that "a process is effective if its outcomes match the stated goals" (Carmichael, 2002).

2.5 Dashboards - data visualization

In order to translate the data gathered and assessed through KPIs to the stakeholders, in the most efficient and easiest way to understand, reporting solutions should be implemented. One of the most used graphical user interfaces is a Dashboard. Dashboards are designed to deliver historical, current, and predictive information, typically represented by KPIs.

A dashboard should be built having in mind its purpose and its users, defining the amount of KPIs presented and the granularity of those KPIs. Given the limited space available on a dashboard screen and the fact that managers at different levels might be looking at the dashboard, a tailored approach should be used by organizations according to the needs of their target users (Rasmussen et al., 2009).

As per Rasmussen et al. (2009), the dashboards can be divided in to three different types according to its purpose. Tactical, which support the measuring of progress in specific initiatives or projects. Strategic, which support organizational alignment with strategic goals. And Operational, which support the monitoring of business processes, business activities and complex events.

The dashboards used in this dissertation project are operational since the goal is to monitor the business processes daily or weekly. One of the most important features of an operational dashboard is, according to Rasmussen et al. (2009), the fact that operational dashboards present more detailed information with strong analytical functionality to perform root-cause analysis on the displayed data.

Dashboards are closely related not only with reporting, but also with planning, strategy and analytics. As Rasmussen et al. (2009) defends, there are several benefits when using dashboards. The main ones are:

- **Improved decision making and performance**

- Ability to identify and correct trends;
- Ability to measure efficiencies;
- Ability to align strategies and goals;
- Ability to make better and informed decisions.

- **Employee efficiency gains**

- Increased productivity;
- Saving time by eliminating multiple reports;
- Low training requirements.

- **Employee motivation**

- Users can generate detailed reports showing trends;
- More time spend analysing data instead of finding, compiling and formatting it;
- Dashboards are a means to share strategies and goals which empowers employees to understand objectives and make the right decisions.

The way the data is presented is key to pass the correct message to the people who make decisions. A good visualization is the most powerful form of communication to share information, ideas and knowledge, and in a world governed by data, it is its shared language (Berinato, 2016). Dashboards allow the use of visual cues in order to focus users attention on important information, trends, and exceptions.

Several studies show that the brain processes visual information and images in many different ways, some processing is performed immediately and automatically rather than consciously. Some differences in color, and certain attributes including shape, size and orientation stand out and are immediately detected. Data visualization takes advantage of this and allows people to process data faster using these innate visual processing capabilities (Archambault et al., 2015).

Archambault et al. (2015) defends that, for the users to process data visualizations efficiently and effectively, the majority of the visualization area should be essential to display data. The best practices recommend including only the information and graphical elements that are absolutely necessary. "Extraneous markings, such as grid lines and excessive labeling, should be avoided as much as possible", as it is considered unnecessary, in the sense that it will make it harder to interpret the information quickly and fully.

Nonetheless, all the labelling and markings that are indispensable, should be used so that data can still be accurately expressed on the dashboard.

Proper data visualization allows organizations to communicate their message in a more compelling and interesting way, and more important than that, it assists in the understanding of complex data, so that all the stakeholders can have a lot of meaningful quality information to make the best possible decisions.

Chapter 3

Initial status of the Premium Service team

The growth on luxury fashion led Farfetch to the creation of a team specialized on the operational side of the business, in order to facilitate the work of the stylists that are serving the FF-Access-Private-Client clients. This is the highest tier of clients inside Farfetch's Loyalty program and accounts for a significant part of the sales.

The Premium Service Team is an operational team inside Customer Excellence (CE) whose goal is to serve the FF-Access-Private-Client clients. This team has some special characteristics when comparing it to other CE teams. The SLAs are much higher since it is a premium service, thus the time to solve the problems is tighter. Hence, it is of primary importance to be as efficient as possible in order to respect the SLAs and to achieve the team's goals. With that in mind, this project was implemented to understand the way the team works, and to get more and better information to provide the best insights for managers to optimize the performance.

The FF-Access-Private-Client customers have personal stylists that handle all the operational side for them, thus the direct clients of the Premium Service team are the stylists. All the communication between the stylist and the team is managed through email or cases inside Salesforce (CRM).

3.1 Team structure

The Premium Service team is a team formed by agents that are spread all over the world, in fact there are 12 agents and 1 supervisor in Portugal, 4 agents and 1 supervisor in China, 1 hybrid agent in Middle East and 1 hybrid agent in Japan that work part time with the CS team, and finally there is one agent in the United States that works as a Premium Service agent full time.

This project was developed in Portugal, despite of having a global scope. Hence, the focus was more on the Portugal Premium Service team, however the conclusions will be used in all teams, since the Portugal team is the biggest and most representative.

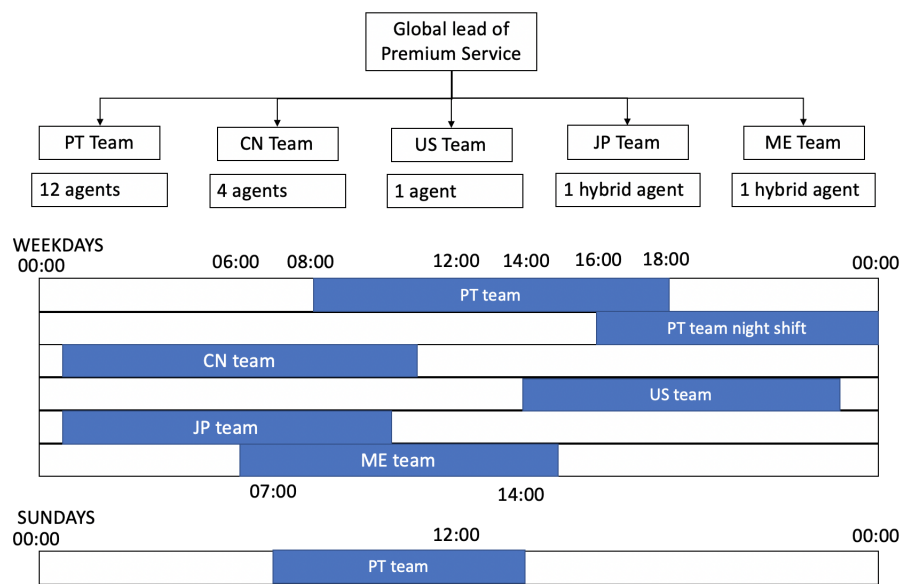


Figure 3.1: Structure and schedule of Premium Service Global (WET)

On weekdays, the Portugal team covers the schedule from 8:00 to 18:00, and there are 2 agents working in Portugal on the night shift from 16:00 to 00:00. The agent from US covers the schedule from 14:00 to 23:00. The China team starts at 01:00 and finishes at 10:00 divided in two shifts as well (01:00-10:00) and (02:00-11:00), the Japan team starts at 01:00 and finishes at 10:00 and the Middle East agent works from 06:00 to 15:00 as shown in Figure 3.1. On weekends there is one agent from team Portugal covering 7 hours on Sunday. This schedule ensures almost a full coverage of the week. The only weekday that does not have any coverage is Saturday.

To understand the day to day work of the team, the processes were mapped accordingly to the best practices of Han et al. (2010) and Dumas et al. (2013), completing the transition from agents tasks to business processes. Firstly the overall day to day work of the team was outlined, and then the specific business processes for every agents action were mapped.

3.2 Day to day work

The biggest part of the Premium Service agents workload is the case management, the normal handling of the cases that appear on the team's queue. Besides that, the agents have specific tasks assigned during the week, backlog analysis, queue supervision (queue master) and handling the proactive and monitoring files. These more specific tasks are only performed by the team in Portugal, the other teams only deal with case management.

The queue master is an agent who is logged in the Omni-channel and is solving cases as any other agent, with the particularity that he is responsible for controlling the number of cases in the queue and, if necessary, adjust the number of agents online in that moment. The queue master asks the agents who are handling the proactive or monitoring files to leave that task for a little while and join the other agents by logging in and starting to receive cases. That way the cases that enter

the queue can be rapidly responded, so that the team can achieve the SLA concerning the case response.

The agent that is responsible for backlog on a given day should check his and his colleagues backlog cases. In backlog are all the cases that have the current status as "on hold" or "pending", and it is the agent's responsibility to check if it is possible to do something to advance with that case and solve the issue.

Everyday three agents are also responsible for working on the proactive and monitoring files. The proactive files are excel files where a set of orders/returns are presented and the agents have to investigate them, manually, in order to anticipate possible problems for the clients and act proactively. And the monitoring files, that can be considered proactive work as well, are files where the agents monitor a set of orders to make sure the client has the smoothest experience possible. These manual tasks will be further explained in sections 3.3.2 and 3.3.3.

The division of the work is done between those three agents and the goal is to complete all files. The one that is given more importance is the "monitor offline products" file since it represents a big part of the teams work and generates sales.

The team performs daily meetings every day where some problems are discussed and the overall results from the last day are analyzed. These meetings have a board where all the important points are written, during the day, to be discussed later. Besides the discussion topics, the results of the day are also analysed by the supervisor and instant feedback is shared within the team so that the results meet the expectations. The board used in this meetings by the team is shown in Figure 3.2.



Figure 3.2: Daily meetings board

3.3 Business process mapping

In order to deep dive into the business processes and map all of them, it was fundamental to understand the customer journey inside Farfetch, and the contacts that can be established with Farfetch throughout that journey.

The Figure 3.3 shows the customer journey and the main points of contact where issues can appear. There are 8 points of contact: Becoming a FF-Access-Private-Client client, visiting and researching the website, and then the purchase journey that can be divided into 6 steps: checkout, pre-delivery, delivery, product received, return and refund. In fact, during the journey of the customer with Farfetch there are a set of issues that might appear along the way, and those issues are reported to the service teams inside CE. The team should follow the correct business processes to be able to satisfy the clients in the best way possible.

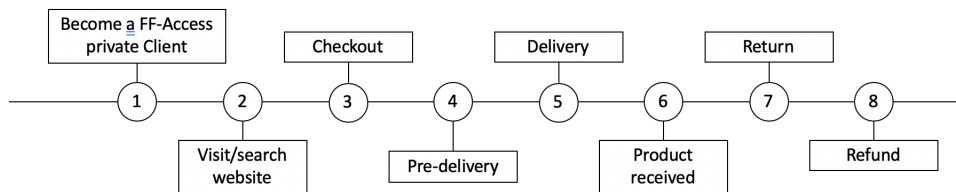


Figure 3.3: Customer journey with Farfetch

Besides understanding the client journey, it is also of vital importance to understand the order and return processes at Farfetch, since these are the two most fundamental processes to fulfill the client's needs and where most of the issues arise. The Farfetch's order process is shown in Figure 3.4:

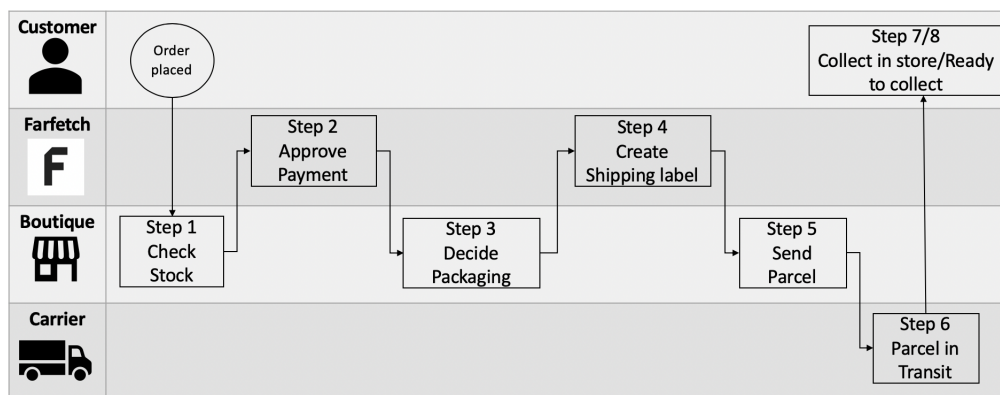


Figure 3.4: Farfetch's order process

The steps that have to be followed since the client places an order until he receives it are as follows:

- **Step 1: Check Stock** - The boutique checks if the item is available;
- **Step 2: Approve payment** - it is an automatic process on Farfetch's side;
- **Step 3: Decide Packaging** - the boutique is responsible for packing the item;
- **Step 4: Create Shipping Label** - in this step the label required to ship the item is created by Farfetch;
- **Step 5: Send Parcel** - the order is set to be sent and is waiting for the carrier to pick it up at the boutique;

- **Step 6: Parcel in Transit** - the carrier has picked up the parcel and it is in transit to the client;
- **Step 7/8: Collect in store/Ready to collect** - when the client receives the parcel.

Once the client receives the order he might need to return it. Once the return process starts it has to follow certain steps in order for the client to be refunded and for the boutique to receive the item back, which are the goals of the return process.

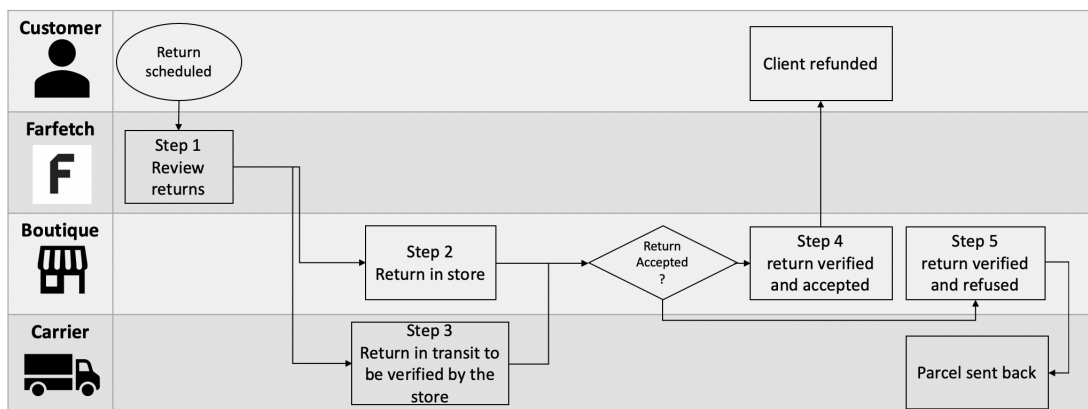


Figure 3.5: Farfetch's return process

The Farfetch's return process starts every time a client wants to return an item. The clients asks for the return, Farfetch reviews the return and then the client has two options, he can deliver the item on a store close to its location, and then the store handles the return to the original store (step 2 - return in store). Or Farfetch asks for the carrier to pick the parcel at the clients location. The parcel arrives to the boutique and the partner decides if he accepts the return or if it does not accept it. If the return is accepted, the client will be refunded by the boutique. If the return is not accepted the parcel is sent back to the client.

With the full understanding of the order and return processes as well as the customer journey of a FF-Access-Private-Client client, it was possible to define and map all the business processes that agents go through to satisfy the Premium Service team's clients (stylists and internal teams). These business processes were mapped following the potential problems that come up along the customer journey and were organised as so. The figure 3.6 represents the list of processes that were mapped and the typical problem, that might appear along the customer journey, that the process tackles.

All this information was passed to the agents and is now available on the knowledge base of the team. All the process mapping can be further explored on the Appendix A.

In summary, there are three different types of work that the team produces: case management, proactive work and monitoring work.

TIMELINE - CUSTOMER JOURNEY	
Problem	Process
Become VIP	PrS-Add Benefits
Become FF Access Private Client	
Customer wants to have a stylist	PrS-CS Stylist's contact request
Visit/search website	
Customer wants to know the price of shipping to another country	PrS-PriceSimulator
Stylist as a specific item to sell	PrS-CreateOfflineProduct
Monitor those specific items	Monitor offline items
Checkout	
Customer wants to pay via Banktransfer	PrS-BankTransfer
Customer wants to pay via SplitPayment	PrS-SplitPayment
Customer is given the chance to "try before you buy"	PrS-ConsignementOrders
Pre-delivery	
Customer wants to receive the item on the SD	PrS-SDDrequest
Customer wants to change the delivery Address	PrS-AddressChange/Redirection
Customer wants to cancel the order	PrS-Cancellations/RTO
The order is still before step 5	PrS - OrderPush
The item is not available and an alternative item is suggested	PrS-SuggestiveAlternative
It is necessary to track the orders and spot potential problems in advance and alert PS to push the boutique	Order pipeline
Delivery	
The order is after step 5	PrS - Customs Hold
Customer wants to change the delivery Address	PrS-AddressChange/Redirection
Customer wants to cancel the order	PrS-Cancellations/RTO
Customer complains about duties wrongly charged	PrS-DutiesWronglyCharged
It is necessary to track the orders and spot potential problems in advance and alert DS	Order tracker
Product Received	
Customer wants to chargeback	Chargeback
The parcel is lost	PrS-LostParcel
The item does not correspond to the one bought by the client	PrS-Wrongitem
The item is damaged	PrS-DamagedItem
Client wants to exchange or the alarm is still on or there is a problem with the item	security alarm; brand assesment; exchanges.
Farfetch matches the price if client finds any cheaper	PrS-Pricematch - honor price paid by client
Farfetch matches the price if a campaign is put in place and the client had already bought the item	PrS-Pricematch - honorpromocode
Return	
Client wants to reschedule the pickup	PrS-SchedulePickUp
Client wants to return the item	PrS-InitiateReturn
The return is contested by the boutique	PrS-Contested Return
The return is lost	PrS-Lost Return
Customer wants to cancel return	PrS-Cancel Return
It is necessary to track the returns and spot potential problems in advance and alert DS	Return Tracker
Refund	

Legend	
Monitor offline items	Monitoring file
Order pipeline	Proactive file
PrS-Add Benefits	Case management

Figure 3.6: List of mapped processes following the customer journey

3.3.1 Case management

The Premium Service team uses the Customer Relationship Management (CRM) system Salesforce to establish and manage the company's relationship with its customers. The CRM system helps the team managing the relationship with the customers using cases to handle those contacts. Inside Salesforce, the team establishes all kinds of communications, both with internal and external entities. The team has its specific queue where all the cases enter and the agents have the responsibility to solve the clients' issues as fast as possible, being at the same time effective and efficient.

It is important to mention that the team works on a pool, which means that any agent can receive any case and one case can be handled by different agents on different occasions. The priority of the case handling is the "first come, first served" rule. Cases that drive sales, like the offline product creation, can get priority when urgent. And cases flagged by management are considered urgent.

The team uses 3 different queues, the Middle East (ME) queue where the hybrid agent works, the English (EN) queue and the Japan (JP) queue where the other hybrid agent works as well. The main queue is the English queue where all the other agents work. Every time a case arrives to the ME or JP queue outside business hours, it is allocated to the EN queue so that the case can be rapidly answered.

The routing of the cases once they enter the queue is responsibility of the Omni-channel (see Figure 3.7). The Omni-channel is a functionality of the Salesforce CRM system that automatically routes cases to the most appropriate and available employee, accordingly to its skills set, availability and capacity to handle incoming work.

When the status of an agent is set to available, the agent is logged in and ready to receive cases that come from the stylists/internal teams. The agent has only two possible status inside the Omni-channel, available and offline.

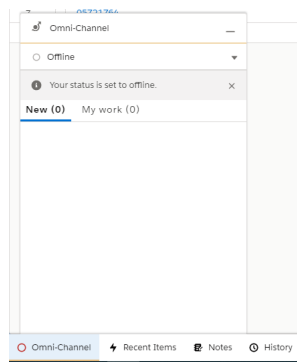


Figure 3.7: Case routing through Omni-channel from Salesforce CRM system

The normal flow of actions on a case management process is as follows: the case enters the queue with the 'new' status, the agent opens the case, categorizes it, according to the issue that it states on the case, investigates and then responds to the stylist. If necessary it will give a soft reply and then will create a child case to an internal team in order to solve the issue. After getting the response from the internal teams the agent responds to the stylist and solves the case. Otherwise, if not necessary the help of internal teams, the agent just replies and solves the case. Later, the stylist can reopen the case just to say "thank you" or to alert that the issue was not properly solved. When the case reopens, it appears on the queue to be handled once again. If the case stays solved, without any further interaction for more than two weeks, it acquires the status closed. Figure 3.8 depicts the user interface of Salesforce when the agents consult the queue.

Case Number	Contact Name	Subject	Status	Case Owner Alias	Date/Time Opened	Last Modified Date
05586080	Blue Bird	Blue Bird	Re-Open	PREMIUM SERVICES EN	04/05/2020 11:47	18/05/2020 10:59
05648966	Blue Bird	Blue Bird	Re-Open	PREMIUM SERVICES EN	11/05/2020 10:33	18/05/2020 11:00
05667087	Blue Bird	Blue Bird	Re-Open	PREMIUM SERVICES EN	12/05/2020 17:38	18/05/2020 11:00
05671716	Blue Bird	Blue Bird	Re-Open	PREMIUM SERVICES EN	13/05/2020 08:53	18/05/2020 11:01
05714841	Blue Bird	Blue Bird	Re-Open	PREMIUM SERVICES EN	17/05/2020 08:54	18/05/2020 11:00
05721681	Blue Bird	Blue Bird	New	PREMIUM SERVICES EN	18/05/2020 10:58	18/05/2020 10:59
05721764	Blue Bird	Blue Bird	New	PREMIUM SERVICES EN	18/05/2020 11:03	18/05/2020 11:03
05721793	Blue Bird	Blue Bird	New	PREMIUM SERVICES EN	18/05/2020 11:04	18/05/2020 11:04

Figure 3.8: Salesforce interface, Premium Service queue

There are six possible status in a case and the description of each one is as follows:

- **New:** The case was just created and has not been assigned to any agent;
- **Open:** The case was just assigned to an agent and is waiting for the agent to handle it;
- **On Hold:** The agent is awaiting for an internal response in order to proceed with the problem resolution;
- **Pending:** The agent is awaiting for an external response in order to proceed with the problem resolution;
- **Solved:** The case was resolved with success and it is not expected any more interactions. The case can reopen within 15 days after being solved, in case something new related with the previous problem arises and the agent's attention is needed again;
- **Closed:** When the solved case stays 15 days without any kind of interaction, the case is closed, and it is no longer available to work on.

Every time a case is open, the agents have to perform a set of interactions to handle it. The interactions available on Salesforce are: email, when the agent has to contact an external entity, post, when he contacts with an internal entity, comment, when the agent comments other agent's interaction, status change, when the agent changes the status of the case, and case creation, when a case is created.

Every time an agent wants to contact an internal team, he has to create a child case for that team. The child case is a new case for the internal team that is directly linked with its parent case, the case from Premium Service. Both teams communicate on the child case through posts, and every time a new update comes in the child case, the parent case reopens, so that the Premium Service agents can see the update and handle it.

Inside case management, there are multiple different paths that a case can take according to the issue that is stated. The main paths were mapped during this project, what allowed the team to standardize the way the cases were solved by each agent. Before this, there were some differences in the handling of the cases by each agent.

All these different business processes were designed according to every different path triggered by the issue stated on the case. An example of this process mapping activity is the process that

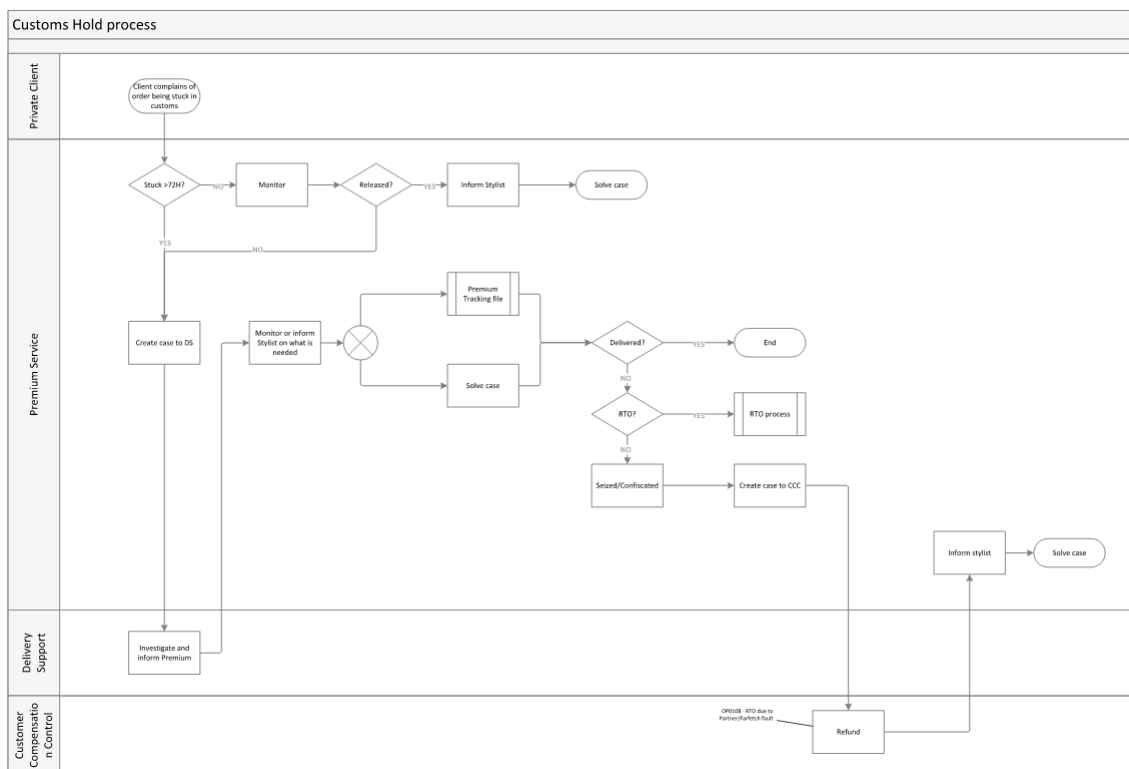


Figure 3.9: Customs Hold process

the agents have to follow every time they have a case categorized as "Customs Hold". The process flow is represented in Figure 3.9.

The Customs Hold process is triggered every time the client complains that an order/return is stuck in customs, or the agents proactively notice that. If it is held for more than 72 hours, the agent creates a child case for the DS team that will handle the release of the order/return with the carrier and customs. After that, the Premium Service team keeps tracking the order until it is delivered to the customer/partner. The team solves the case and uses the premium tracking file to monitor the order. Then, three different paths can be followed: Either the client receives the order, or the order is returned to the origin (RTO) and the Premium Service team initiates the RTO process, or the item is confiscated/seized by customs, and the Premium service team has to create a child case to Customer and Compensation Control (CCC) so that they can refund the client. This process is an example of the work developed by the agents every time they are working on case management. All the other processes can be seen on the Appendix A.

3.3.2 Proactive files

The proactive files are an activity that Premium Service does in order to anticipate the clients problems. The goal is to spot issues and act upon them in order for the client not to notice and have the smoothest journey possible. These problems may occur during three different stages of the customer order. The first stage is when the order is being prepared in the boutiques, the

partners have two days to ship the order, although sometimes, for several reasons, it is delayed. The second phase, is the transit phase, when the order is being transported from the boutique to the client. Here, once again, many events can occur, for instance the order can be stuck in customs. And the third phase is when the client returns an order and is waiting to be refunded. These stages can be seen in Figure 3.10.

The proactive files compile all these problematic situations and the agents will analyze each one and decide if they can act upon it or not. The processes behind the proactive files tasks can be consulted in Appendix A.

The proactive files are created through queries that get the orders/returns that need to be investigated. Although these queries filter much of the possible issues, due to the great level of particularities associated with each order/return, the agents still have to do a manual investigation and decide what to do, issue by issue. The agents refresh the files everyday and go through the orders, one by one, deciding if they can or can not do something to push the order/return, i.e. make the order/return go faster through the boutique or when it is in transit. Premium service has the ability to push orders/returns by creating child cases to the internal teams. If the order is in transit a child case to DS is created, if the order is on the partner's side the team creates a child case to PS. There are three different proactive files managed by the Premium Service agents.

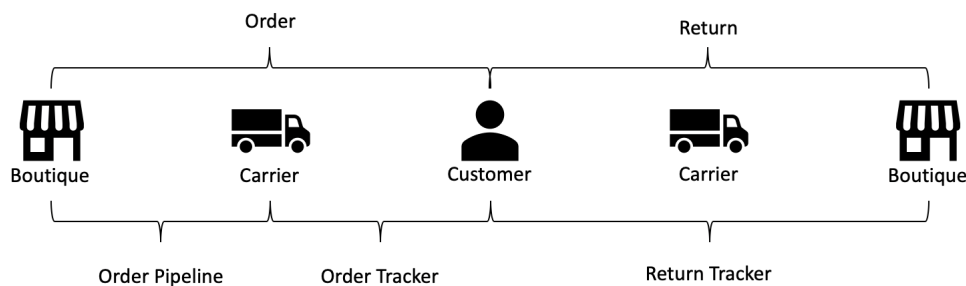


Figure 3.10: Proactive files during order journey

- **Order Pipeline:** In the order pipeline file, all the orders that are between step 1 and step 5, according to Farfetch's order process, are presented. That means that those are the orders that are still in the boutique being prepared and waiting to be picked-up by the carrier.
- **Order Tracker:** In the order tracker file, all the orders that are currently in transit and can be pushed by the agents, are listed. This way the agents can keep track of possible problematic situations and intervene whenever necessary.
- **Return Tracker:** In the return tracker file, all the orders that are currently going from the client back to the boutique are shown. The agent checks if it is possible to accelerate the process in order for the client not to wait too much for the refund.

As these tasks are performed on excel files, the WFO team has no visibility upon this work. Thus, it is not possible to analyze the performance of the team on this type of activities.

3.3.3 Monitoring files

Besides the proactive files, the Premium Service team also performs a monitoring work, where the agents monitor the order/return until the client is fully satisfied, so that if something wrong happens, the agent can immediately act upon the situation and proactively solve the problem. This files can be interpreted as proactive work, in the sense that the agents are doing something that the client didn't ask to, but they differ from the proactive files because most of the times a new case is not created from them, and the agents only monitors until the client is fully satisfied. There are two types of monitoring files:

- **Monitor offline items file:** Premium service gives the chance for its clients to buy unique products that are specially requested by the stylist to go online, so that the client can buy it. With that in mind, the team created a file where it is possible to control the items that are currently online and the ones that have already got an order associated, so that they can go offline as soon as the client buys them. The agents have to regularly check if the item is available since these are unique products that only this specific client should buy, so the product should be taken offline as quick as possible. The work that is done in this file is described by the process presented in Figure A.5 in Appendix A.

The stylist creates a case for the Premium Service team in order to put an exclusive item online for a specific customer. The Premium Service agent responsible for the case, creates the item and puts it online. After that, the agent solves the case and the case management process is finished. Then the monitoring work starts, the team monitors the item in this file so that when it is bought it can be put offline once again. It is the file that represents the most part of the team's manual work since the "Create Offline Product" category is the main category of Premium Service. It is given higher priority to this file since it represents cases that drive sales.

This work is soon going to be replaced by an automation process, in a project that is expected to let the agents more available to case management, and not so much dedicate to repetitive tasks, such as controlling the items that are online.

- **Premium Tracking file:** The Premium Tracking file's goal is to monitor all the orders that are going to be delivered to the client or picked up at the clients location. The main objective is just to monitor the parcel and if a problem arises intervene. The issue with this file is that all the information is added manually which makes it very hard to measure.

3.4 Lines of action

With the process mapping of all agent's actions it was possible to understand the way the team works, to highlight the main pain points that correspond to inefficiencies, to standardize the way agents work, and more important than all, it was possible to bring more and better information to the WFO team. This will allow the WFO team to properly analyze and tackle those inefficiencies

and give the necessary support to the Premium Service team. This work led to the discovery of many enhancement opportunities, several strategies were drafted upon this and were implemented throughout the duration of the project.

The main lines of action, resulting from this initial approach of understanding the day to day activities are described in the following subsections.

3.4.1 Cases categorization

The process mapping of all agents' actions allowed to understand that some cases were not being correctly categorized by the agents, and that the categorization was highly dependent on the agent that handled the case. Thus, a revamp on the way agents should categorize the cases was implemented so that it can better represent the processes performed by the agents, bringing more accurate information to the WFO team.

3.4.2 Proactive work performance

Through the process mapping and metrics evaluation it was possible to verify that the proactive work was a blind spot for the WFO team. In fact, since this proactive work is done on excel files it was not possible to measure it. Therefore, new metrics were created to bring that information into the WFO team, so that the performance was better analysed, the forecast was improved and the scheduling was enhanced as well. Besides that, and in parallel with the construction of the new proactive work metrics, some changes were implemented on the queries that retrieve the orders/returns that must be investigated by the agents on those files. Before that, all the orders were presented on the files and the agents had to investigate all of them. Right now, the queries are using filters that only retrieve orders/returns that the agents can effectively do something with, improving efficiency and effectiveness.

3.4.3 New metrics and dashboards

In order to bring more and better information for the WFO team and to feed the workforce cycle, with data as complete and accurate as possible, some metrics were reformulated and some new metrics were created, including the ones related to the proactive work, and new dashboards were also built. One problem that concerned the Premium Service team supervisor was the fact that there was not always data available to evaluate the daily performance of the team. In order to respond to that, a daily dashboard was created, which allowed the team to evaluate everyday performance on the daily meetings. On the other hand, one of the weakest points of the WFO team was the fact that there was not a place where all the metrics related to the Premium Service team could be analysed and interpreted as a whole. Therefore a 360° performance monitor was created with the goal of concentrating all the key metrics in one place.

Chapter 4

Translating business processes into business intelligence

After the understanding of the team's day to day activities and the mapping of all the processes, the next step was to transition from business processes into business intelligence. Several lines of actions were defined, the first one is an improvement on the categorization of the cases that will ensure more reliable data. The second one is the creation of metrics that did not exist, so that all the processes can be measured, translated into data and then analysed. And finally, completing the transition into business intelligence, the metrics that were created and reformulated were gathered to create dashboards. At this point, all the relevant Premium Service data is available for the stakeholders to make the best business decisions possible based on the most accurate data.

In this chapter, the different lines of action are described and the implementation of those lines is explained. Furthermore, the results for each line of action are presented and interpreted.

4.1 Cases categorization

With the process mapping of all agents actions it was possible to understand that some cases were not correctly categorized by the agents, and that the categorization was highly dependent on the agent that handled the case. This lack of categorization quality was highly prejudicial to the WFO team since every analysis made, based on the category of the case, was biased.

The categorization of the cases was reviewed and, based on the categories available on Salesforce, a direct association was defined between the processes and the categories. That way, when an analyst wants to analyze one process there is only one category that corresponds to that process, and a set of cases can be analyzed and conclusions about that process performance can be taken. Before this, the number of traces (paths) that the cases with a certain category could follow, was much higher, thus, the process analysis was much more difficult.

4.1.1 Changes implementation

The main problems spotted had to do with the main category "My order" that represents cases where the issue reported is related to the client's order. Inside this category there are several subcategories that specify the problem of the client. The main issues were related to the subcategories "Customs Hold" and "Order Delay", since these two subcategories represent two core processes of the team. The "Customs Hold" subcategory should represent the "Customs Hold" process, where the team has to create a case to the DS team, because the order is stuck in transit. And the "Order Delay" subcategory should represent the "Order Delay" process, where the team needs to contact the PS team in order to understand why is the order stuck on the partner's side. These two types of cases were being categorized on some occasions as "Tracking Information" or "Status Request". These two subcategories are very generic and do not translate the process behind the case category. With that in mind, a revamp of the categories usage was implemented in order to translate the processes mapped and bring better information to the WFO team, mainly for the process inefficiency analysis that is done based on the categories.

Before this update, every time an agent received a case asking where the order was, he would just categorize it as "Tracking Information". Although the order could be on the partner's side, or in transit. After the categorization revamp, agents started categorizing this type of cases according to the process that they are going to perform. If the order is still on the partner's side, it will be categorized as "Order Delay", and the process will be to create a case to the PS team. If the order is in transit, they will categorize the case as "Customs Hold", and a case to the DS team will be created. This slight change brings more reliable information for the WFO team and several analysis can be run upon this, as it shows the correct process behind.

All the other categories and subcategories were reviewed and for each one, small adjustments were made in order to improve the cases categorization. For instance, all the proactive cases resulting from the proactive work files have a certain category according to the stage of the order, if it is on the partner's side it will be order delay, if it is in transit it will be categorized as "Customs Hold" and if it is returning to the boutique it is categorized as "Return - Status Request".

4.1.2 Results

Before the cases categorization revamp, the results were biased because a case that had a given subcategory would not represent the true process behind it, resulting on a misjudgement every time an analysis was performed at the category level. A clear example of this, was the fact that once the new way of categorizing cases was implemented, the top of categories was slightly changed, representing better the work that was performed by Premium Service agents, as shown in Figures 4.1 and 4.2.

An analysis on the categorization update was performed in order to understand the impact of these changes. All the changes were implemented on the 17th and 18th weeks of the year and the results show the cases categorization 6 weeks before and after this 2 week period. A growth rate was calculated between the 2 periods in order to compare them. The total number of cases of the

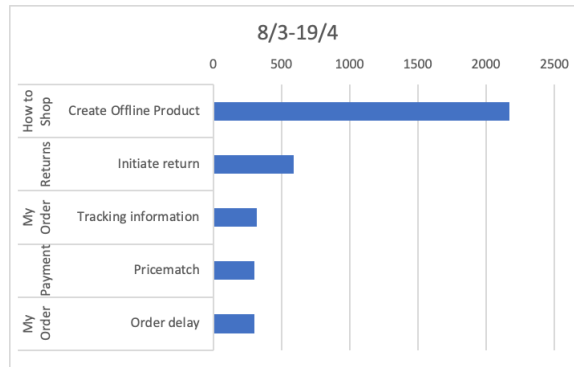


Figure 4.1: Top Categories from the 8th of March to 19th of April

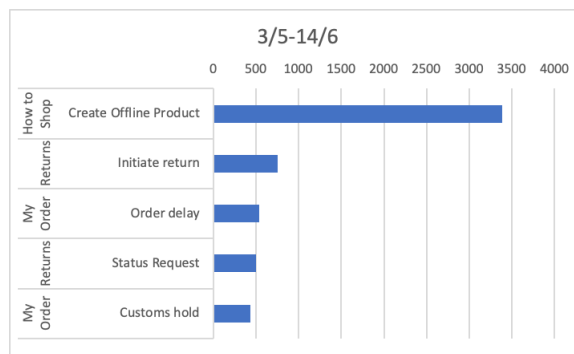


Figure 4.2: Top Categories from the 3rd of May to 14th of June

second period was 35% bigger than the first period, as it can be seen in Table 4.1. This growth is explained by the entering of a new sale season in the middle of this period, which makes the number of orders go up, thus, increasing the number of contacts. A shift in the number of cases per category was observed after the revamp, which allowed to assess how deviate the previous analysis were. Assuming the same growth rate for all the categories, the deviations were calculated in Table 4.2 based on the equations 4.1 and 4.2.

Table 4.1: Growth Rate analysis

	before	after	Growth Rate
Total Cases	6905	9343	35%

Table 4.2: Categorization analysis

Category	Subcategory	Before (a)	After (b)	Assuming same growth (c)	Deviation
My Order	Customs Hold	292	434	395,1	9,0%
My Order	Tracking Information	316	71	427,6	507,2%
My Order	Order Delay	300	536	405,9	24,3%
My Order	Status Request	123	150	166,4	11,0%

$$(c) = (a) \times 1.35 \quad (4.1)$$

$$Deviation = \frac{|(b) - (c)|}{(b)} \quad (4.2)$$

As it is possible to see in this analysis, the "Customs Hold" Subcategory, prior to the change implementation, represented 292 cases. After the change of the way cases were categorized, the "Customs Hold" subcategory accounted for 434 cases. Assuming the same growth rate, 35%, it was expected for the subcategory to account for 395 cases. In fact it accounts for more than that and it is possible to assume that it was due to the categorization revamp. If this change was not implemented, all the analysis performed by the WFO team, upon the "Customs Hold" subcategory, would be biased by 9%, because the team would be looking at 395 cases instead of the 434 cases that are truly "Customs Hold" cases. Most of these cases were hidden in the "Tracking Information" and the "Status Request" subcategories, mainly due to the different interpretations each agent had towards a category. To prove that, an analysis of the top categories shows that the "Tracking Information" subcategory dropped from the top 5 and the total number of "Tracking Information" cases is now 71. The calculated error associated with an analysis based on the number of "Tracking Information" cases would be 507% if the categories had not been revamped. Likewise, the "Order Delay" subcategory had an error of 24.3% associated with every analysis based on the number of cases with this category. Before the change in the categorization, the "Order Delay" subcategory accounted for 300 cases and now it accounts for 536, 24.3% more than the expected growth would generate. As in the "Customs Hold" subcategory, most of these cases were being wrongly categorized as "Tracking Information" or "Status Request".

This analysis shows the importance of a correct cases categorization when it comes to analyse a process through its category. Now the WFO team can carry more reliable analysis towards the categories of the team. Nevertheless, there is still some work to do on the Salesforce's side by creating new and more adequate categories for the team. For instance the "Returns-Status Request" subcategory is being used for the returns proactive work and it does not completely translate the process behind it. There is already a project going on to change the categories that the agents can choose, and to create outcomes for those cases, so that it can even better correlate to the processes mapped. This correlation, between processes and the new categories, was already established and defined during the execution of this project and it is expected to bring even more accurate data. In Appendix A there is the list of the new categories and outcomes to be implemented and the associated process.

4.2 Proactive work performance

As explained previously in chapter 3, the WFO team lacked information on the proactive work performed by the agents. Through the process mapping and metrics evaluation it was possible to verify that the proactive work was a blind spot for the WFO team. In fact, because this proactive work was done on excel files, it was not possible to measure it. Therefore, new metrics were created to bring that information into the WFO team so that the performance analysis was enhanced, the workload forecast was improved and the scheduling was refined as well, following the team's continuous improvement methodology.

Besides that, and in parallel with the construction of the new proactive work metrics, some changes were implemented on the queries that retrieve the orders that must be investigated by the agents on those files. Before that, all the orders were presented on the files and the agents had to investigate all of them. Right now, the queries are using filters that show less orders on those files, and now it is showing mainly orders that the agents can effectively do something. As a result some noise was removed from the file, improving the overall efficiency of the task.

4.2.1 Proactive work metrics

The metrics built were: the number of orders presented on the file, the number of cases created through those files and the time spent on the files. The metric "number of orders" was created by registering the number of query results every hour, so that a backlog was implemented and it was possible to keep track of the number of orders in a given day, at given hour.

The metric "number of cases" was created using the same logic of the metric "work sources" that will be further explained in the section 4.3.1. Two work sources were defined, "case management" and "proactive work". The cases that were created by the Premium Service agents to the Premium Service team, from these files, were called "proactive work" and the cases that were created by external entities to the Premium Services team were called "case management". The "number of cases" corresponds to the cases which work source is "proactive work".

The problem with the proactive work performance measurements, is that it is still not possible to measure the time that the agents spend on a given file. In order to tackle this issue, a request to the CRM development team was put in place, for them to create different status in the Omni-channel. This way, the agent can log himself in the Omni-channel according to the task that he is performing. If the agent is solving cases on the queue, the status is going to be "Online". If the agent is not available to solve cases, the status will be "not available". And if the agent is performing any proactive work, the status will be the name of the file. This logic will be implemented so that the time spent on the file can be registered and then fed into the database to build the metrics around it. This development was not ready in time for this dissertation project, so the average handling time for each line on a given file was measured manually with the help of the agents. Every time an agent was allocated to the proactive files task the agent would, at the end of the day, tell the number of lines that he investigated on a given file and the time spent, so that an average handling time was found. In the future this data will be automatically computed through

the report from the Omni-channel, that shows the times each agent was logged in each status, thus in each file.

4.2.2 Files construction

4.2.2.1 Order Pipeline

As shown before, the goal of the order pipeline file is to show the orders that are between step 1 and step 5. Previously all the orders that were between step 1 and step 5 appeared in this file. Now, only the orders that have a higher probability of getting stuck are shown, so that the agents can focus on the most important orders and effectively push the ones that have problems. The agents have to go through all the orders shown in the file and investigate them manually, deciding if they can push the order or not. If so, the agents create a case to PS, that will talk with the boutique and try to make sure that the order is shipped as quick as possible.

Previously, the query was returning all the orders with more than 2 days that were still on the partner's side. After analysing the different conditions, the particularities of some boutiques and the way the PS team works, several changes were implemented. Having in mind the goal to make the file as clean as possible for the agents to be more efficient.

This was able to reduce the number from 5850 orders to 450, reducing it about 1300%, making the work less heavy for the agents, motivating them, and making it possible to investigate every order, every day, keeping a closer control of the orders.

The main changes applied to the query were: the fact that now agents only look at orders that have more than 4 workdays, several boutiques were excluded from the file due to some business rules and constraints, and the orders that arrive at step 5 on the same day that the file is refreshed, are not showing as well, since they are most certainly going to be picked-up on that day. This new query can be consulted in the Appendix B.

4.2.2.2 Order Tracker

The goal of the order tracker file is to show all the orders that are in transit and can represent a problem. The agents go through all those orders and try to identify the ones that can be handled, in order to release them from customs, or just to push the carrier to deliver it faster. In this file, all the cases are going to be created to the DS team, and it was very important to understand the way the team works so that the file only shows the orders where something can be done, making sure that there is no duplicated work on both teams.

With all that in mind, the query was reviewed and now the file presents 1000 orders per day, on average, which is a decrease of 600% on the number of orders shown. That is due to some new rules applied to the query to filter the information, namely, only showing the orders that are stuck in transit for more than 4 workdays and keeping some orders out because of the country they are being shipped to.

This way, the work of an agent on the file is much more efficient since all the orders he is looking at, are orders in which he can effectively do something. This new query can be consulted in the Appendix B.

4.2.2.3 Return Tracker

In the Return Tracker file the same logic was applied, the query was reviewed inserting all the rules that were found necessary in order to make the file more efficient (consult Appendix B). It is now showing on average 50 returns per day, which represents a decrease of 700% when comparing it to the prior versions of the file. Instead of looking to all the returns, the file only takes into account the returns that have more than 4 workdays and have not been yet totally refunded. Since the main concern of the Premium Service team is the client satisfaction, it makes sense to pay attention only to the returns that have not yet been refunded, and refund them proactively. Then, the PS team will try to recover the cost with the partner, but the Premium Service team has already refunded the client ensuring a good experience when returning an item.

4.2.2.4 Monitoring files

In the monitoring files the same logic was also applied. For the Monitoring Offline Items file, the goal was to show only the products that had 1,3 or 5 days, as explained on section 3.3.3. Besides that, a color code was also added so that the agents could quickly identify which orders they needed to investigate. This file is showing on average 180 items per day and it is the most important file, being the one that is given priority everyday, since it generates sales.

The Premium Tracking File is not possible to measure for now, since the orders added to this shared file are added manually, there is no way to register the number of orders shown in the file in a given moment. Furthermore, since the file is shared, every agent can change its dynamic. In the future a deeper analysis should be performed in this task to evaluate the impact on the client. If it has a positive impact, then it should be reviewed in order to improve the efficiency and effectiveness of the work.

4.2.3 Results

Once all the files were adapted, the agents started to use them, and it was possible to measure this part of the work. All the files have shown a significant decrease in the number of orders, which translates into more motivated agents to perform these manual tasks. The main advantage, referred by the agents, is the fact that great part of the "noise" was removed from the files, and now, only the necessary information is shown and only the most relevant orders/returns are presented. That way, the efficiency of these manual tasks is expected to grow in the future.

It is also important to mention that this proactive work is left aside once the Premium Service queue gets a high volume of cases. So, it is normal that, when some agents are on holidays or when the demand is higher than expected, these files are left on hold for some time, and less proactive work is performed.

Nonetheless, with this information, it is now possible for the WFO team and for the Premium Service team's supervisor to evaluate the proactive work performed by the agents, and more important than that, a more accurate assumption can be made to define the budget and the forecast for the next periods. As it is right now, the Forecast team assumes that the amount of work on the files (manual tasks) is 12% of the number of cases forecasted. Besides that, the average handling time was assumed to be 7 minutes, the same as a normal case. These new metrics will show the real average handling time, and the real demand (number of lines in the file), for manual tasks. It is also expected that the budget improves as these assumptions become better. So far, with the data gathered, and despite of the small sample (2 weeks), the average handling time to perform manual tasks is 0.98 min, and the volume is around 206% of the total workload. Comparing the forecasted time for manual tasks with the estimated time using these new assumptions, previously there were 3245 min/week allocated to the manual tasks, and now 7849 min/week are expected to be necessary if the team intends to manage all the orders presented in the proactive files. It is of pivotal importance for the WFO and Premium Service teams that in the future a deeper and thorougher analysis is performed in terms of the impact that this proactive work has on the client, evaluating metrics such as customer retention, conversion and customer satisfaction.

4.3 New metrics and dashboards

In order to tackle some of the issues that the Premium Service team had, when dealing with their performance data, the proactive work metrics were created, older metrics were reviewed, a daily report was reformulated and a new dashboard with an overall picture of the team, as well as several useful drilldowns, was created.

4.3.1 Metrics

The first objective was to identify what was key to measure from the team's work. With that in mind, a set of metrics were considered and gathered. Having all the metrics chosen, a comparison between these and the already existing ones was made and the differences identified in order to modify them or create new ones.

As seen in section 4.2, several metrics related to the proactive work were created from scratch, the number of orders on the file, the number of cases created through those files and the time spent on those files. In terms of case management, most of the metrics already existed and can be seen in Table 4.3.

The main changes implemented on the existing metrics were related to the work sources. Previously, the cases were not distinguished whether they were created from external entities, or from the agents of the team, when working proactively. The "work sources" metric was created dividing the total cases in case management and proactive cases. Also related with case management, previously the Premium Service Response Rate metric, representing the percentage of cases that are responded within the SLA, was presented as a whole, and now it is divided in RR Open and RR New. The RR Open represents the number of cases that are not new and that are responded

within the threshold. Every time an external entity responds to a case, that case will reopen on the Premium Service queue and the agents have 1 hour to respond. The RR new is the same as the RR Open but for New cases. It measures the number of cases that respected the SLA for the first reply. Hence, it is now possible to better interpret the results, having the ability to justify if the team is taking too long to answer a new case or a case that is already ongoing. This division gives a better understanding of how the team performs both internally and externally and with new and reopen cases.

Table 4.3: Metrics definition

Metric	Definition
Response Rate (RR)	Percentage of cases that meet the SLA (1h in business hours)
Full Resolution Time (FRT)	Measures the percentage of cases that were solved within 72h.
Contacts Per Order (CPO)	Measures the number of contacts that an order generates, on average.
Workload	Number of cases that arrive at a specific time period
Ratio Solved	Measures the total number of cases solved compared to the total workload on a given period of time
Backlog	The number of cases that need to be worked on to get solved and closed
Forecast Accuracy	Measures the difference between the forecasted volume and the actual workload volume
Top Categories	The ranking of the main categories of the cases

After compiling all the metrics, it was necessary to make sure that only the necessary and most useful metrics were presented, according to the purpose of the dashboard. The goal was to find new ways of presenting all the metrics gathered, in order to transmit all the relevant information for each specific dashboard user. All the metrics presented in each dashboard will be further explained as the dashboards are presented in the next sections.

4.3.2 Premium Service daily report

The daily report dashboard was created in order for the team to have data available everyday, to evaluate performance during the daily meeting and rapidly implement adjustments. Previously there was a shared file where some metrics were presented to the team. This file was not always available and it did not show all the relevant metrics, so a new solution was built in order to attend the team's needs.

The dashboard, presented in Figure 4.3, is organised in 6 major widgets, RR New and RR Open, FRT, Workload table, Backlog range and Backlog status. The time frame for this dashboard is the last 8 days and the goal is not only to give the results of the last day, but also to give a feeling of how the week has been going. In this dashboard, only the important case management

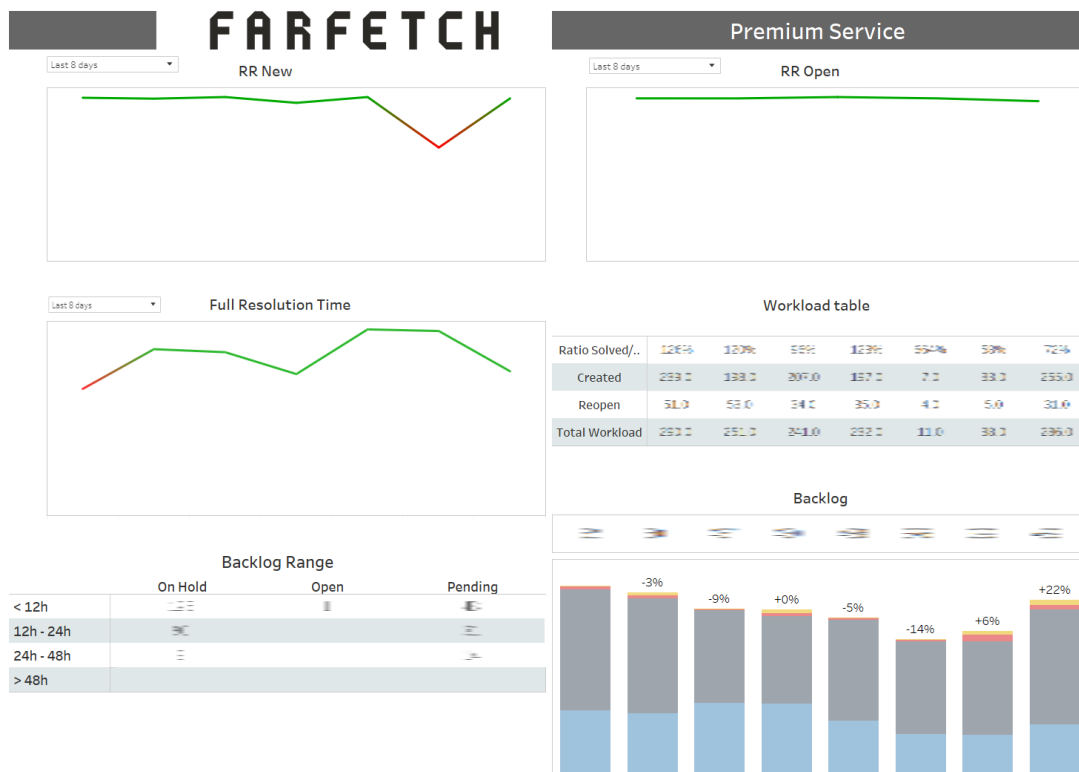


Figure 4.3: Premium Service Daily Report - (Some information is hidden for confidential reasons)

performance metrics are shown since the goal is for the supervisor to guide the agents when a given metric is showing unsatisfying results. This is a very stakeholder oriented dashboard, since it is very operational. All the other business related metrics are kept aside so that the supervisor and the agents can focus on the performance of the team.

The RR widgets represent the percentage of cases that were replied within 1h for new and reopened cases. The FRT, shows the percentage of cases that were solved within 72h. The workload table gives the number of cases that were created, the number of solved cases and the number of reopened cases on a given day. The backlog widgets are mainly used for the agents to keep track of the work, and for the supervisor to control that work, so that nothing gets forgotten for a long time. The backlog range gives the number of on hold, open or pending cases that have not been modified in a given time period. Lastly, the backlog status shows the number of cases and the respective status on a certain point in time.

In the future, proactive work metrics should also be added to this dashboard in order to represent the full picture of the team performance.

This dashboard revealed its utility, for example, when the team started questioning if a Saturday shift would improve the results. In fact, it was possible to identify that, on Sundays, the RR New was always bellow target, which translated that the agent that worked on Sundays did not have time to reply to the cases that have been accumulating during Saturday, during the 1st hour of the shift. Since the RR New metric shows the percentage of work that is responded within

1h inside the team's business hours, on Sundays, when the agent started the shift, there were many cases on the queue and some of them were responded only in the second hour of the shift, thus surpassing the one hour (business hours) threshold and making the metric go below target (95%). This dashboard allowed to spot this issue and a Saturday shift was created. This change was implemented on the 16th of a given month and as we can see in Figure 4.4, since then, the Sunday's RR New significantly improved, thus improving the overall RR New of the team. On the 3rd and 10th (Sundays) of the same month the RR New was always below target but after the change of the shift the RR New improved and the following Sundays, 17th and 24th, were above target. With the use of the daily report it was also possible to understand that, although the agents are working on Saturdays and Sundays, the FRT on Monday is still a little bit low, since the other teams and the clients usually do not respond during the weekends.

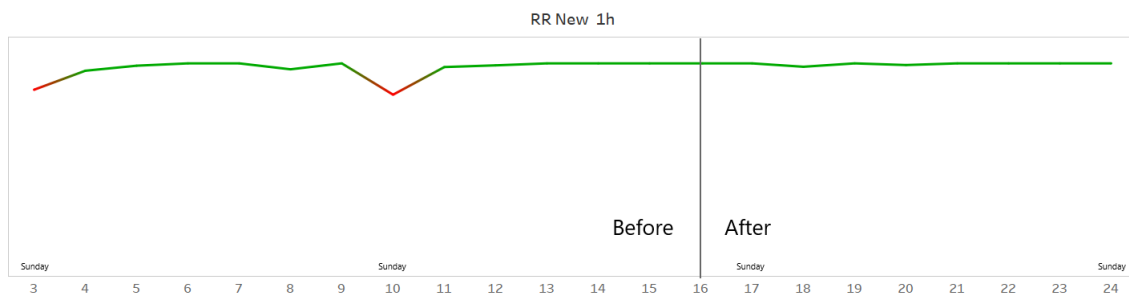


Figure 4.4: RR New before and after new shift implementation

In summary, the daily report was fundamental, not only for the team to spot and tackle performance issues on a daily basis, but also for the other WFO teams to understand patterns of the business and act upon them in order to improve the service.

4.3.3 Premium Service 360° Workforce Reporting dashboard

A Premium Service 360° Workforce Reporting dashboard was created with the goal of giving an overall perspective of the team performance, by concentrating all the key metrics in one place, following the best practices of Archambault et al. (2015). This dashboard uses visual cues and a code of colors (red, yellow, green) to enhance the user experience. And also gives the user the chance to deep dive into a certain metric on a deeper level. It is possible to navigate inside a metric, drilling it down and filtering it by category, agent, dates, etc, trying to find the reason behind a certain result.

The major achievements of this dashboard are: to give the user the chance to have all the relevant information available in one place, instead of being scattered on several different dashboards; The fact that the information is presented in a user friendly way, so that the user can quickly and effectively understand the team overall performance and identify possible pain points; And the fact that high management can now have a full picture of all the work developed inside the team and how the business is going for this specific and relevant tier of clients.

This dashboard can be subdivided into different dashboards according to the stakeholder that uses it. The main dashboard was developed so that all the relevant information is presented, that way, it makes sense for high management to use this. Besides that, the supervisors can also find it useful to evaluate the team performance. Hence, two different branches of the same dashboard were compiled. The first one thinking about high management, that includes the full scope of the team in terms of work performance, finance, clients and agents. And the second one directed to the supervisors, where the work and agents performance is presented, but financial data is removed because it is not necessary for the supervisors to complete their job.

In this report, only the dashboard that is going to be used by high management will be presented, since it is the most complete one.

4.3.3.1 Mission Control Room

The 360° Workforce Reporting dashboard was built for the WFO team high management to consult and understand how the business is going, by looking at the main metrics represented in big figures. The goal is to show the metrics of a given week and the two weeks before that, so that the evolution is shown. The dashboard is versatile in terms of the user i.e., if the user is for instance high management and just wants to have a look at the main figures, the dashboard works as a mission control room, but if the user wants to understand the team performance in detail, for instance a WFO analyst or even the Premium Service Head, it is possible to deep dive in some metrics and try to explore more about them. For instance, the agents performance dashboard can be explored showing the performance of each agent individually.

Figure 4.5 presents the 360° Workforce Reporting dashboard, where all the main metrics are presented. This dashboard is divided into seven main sections according to the presented metrics. (Some information is hidden due to confidential reasons).

The work sources section brings together all the metrics that will affect the amount of work the team will have. First the number of cases that the team had, divided by work source, case management in dark blue and proactive work in light blue, as well as the forecast (orange line) are presented. Besides that, the number of orders made by FF-Access-Private-Client clients is shown as well, since there is a direct correlation between this metric and the number of cases, represented by the contacts per order metric (orange line), it is important to refer that the scales are different and if the values were displayed it would be easier to illustrate that.



Figure 4.5: Premium Service 360° Workforce Report

The second section is where some financial results are presented, a comparison between the revenue that comes from the FF-Access-Private-Client clients and the costs associated with the Premium Service team (orange line) is made. In the costs metric, the salaries of the agents, the licenses that the agents have to use, as well as the cost center of the team, are taken into consideration.

Lastly, in the upper section of the dashboard, there is the clients widget, where the current total number of clients is displayed and the variation from last week is presented, in green the amount of clients added and in red the amount of clients dropped.

In the lower section of the dashboard, the operational side of the business is shown. In here, more operational metrics can be analysed, namely metrics related with the case management performance, the monitoring and proactive work performance and the agents individual performance.

In the case management performance section, the RR, both new and open, as well as the FRT are displayed on a chart, showing the evolution throughout the last three weeks. Every time one of these metrics is below the target, the line turns red on that specific week. The workload table shows the total workload, the division of that workload in created and reopened cases and the ratio solved interactions, that represents the number of solved cases divided by the total workload. This table is very important for the supervisor to have a feeling about the team's productivity and to keep track of the number of reopened cases that the team tries to keep as low as possible. The top categories widget shows the accumulated total of cases, by subcategory, during the last three weeks, as well as the percentage of the total cases that each subcategory represents. Finally, the backlog status is presented showing the number of cases and its respective status in a given week. The proactive work performance section gathers information about the three new metrics created to measure the proactive work. Each of the three files has its own chart and the number of orders seen, the number of cases created, as well as the time spent on the file, are presented. In a similar way, the monitoring work performance section shows the number of lines handled in the file, as well as the time spent to manage those orders.

The agents performance section shows the average values of the team's agents, in the last 3 weeks, in each specific metric: number of cases created, number of cases handled, number of posts, number of comments, number of emails, the total number of interactions and the number of interactions per day and per case.

This works as a mission control room where the main numbers are presented. The next step for the user is to spot some potential problematic numbers and further explore them. This exploration is guaranteed by clicking on the metric to be explored. This opens a new dashboard where the user will deep dive in this metric, looking for a thorougher analysis, using a set of drilldowns and filters (subcategory, date, agent, ...), in order to find the root cause for a given result.

4.3.3.2 Work Sources drilldown

In order to understand the sources of the cases that appear in the Premium Service team queue and to find out more about the forecast and forecast accuracy, the user should click on the work sources widget. The dashboard presented in Figure 4.6 will show in detail, the sources from which the work appears, it can filter the information by subcategory, therefore it is possible to understand if a given subcategory results more from proactive work or case management. It can also be filtered by date in order to understand for instance the evolution of the number of cases as well as the percentage of proactive work performed on a given week.

Besides the work sources, it is possible to understand the forecast accuracy, in order to guide the Forecast team and make some adjustments to the forecast algorithm in order to improve it.

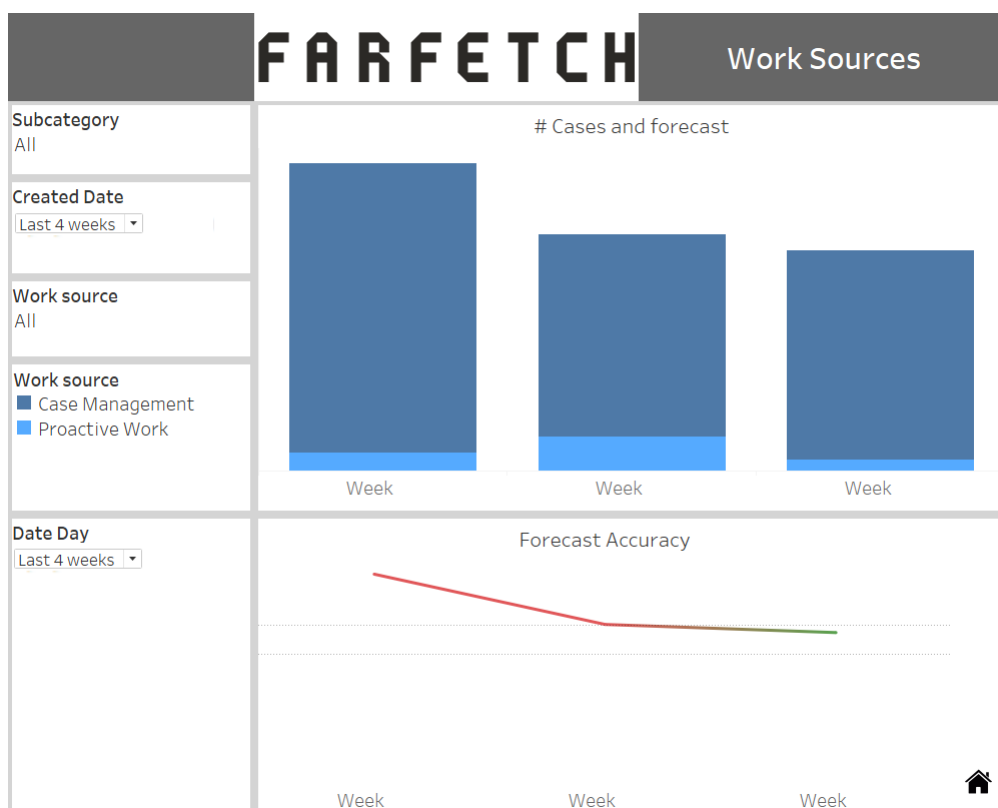


Figure 4.6: Work sources drilldown

4.3.3.3 RR drilldown

If the user wants to further investigate the RR of the cases, a set of drilldowns are available for that effect on the RR dashboard, as shown in Figure 4.7.

By clicking in the RR widget, the user finds the RR dashboard where the RR New and RR Open are presented. The user can explore the RR using different time frames in order to understand the evolution of the metric. It can explore the category and subcategory of the cases, in order to understand if a process related to a specific category is having an issue that decreases the RR

constantly. And it can also be investigated if the RR is related to a specific agent or a specific queue by filtering the skill name.

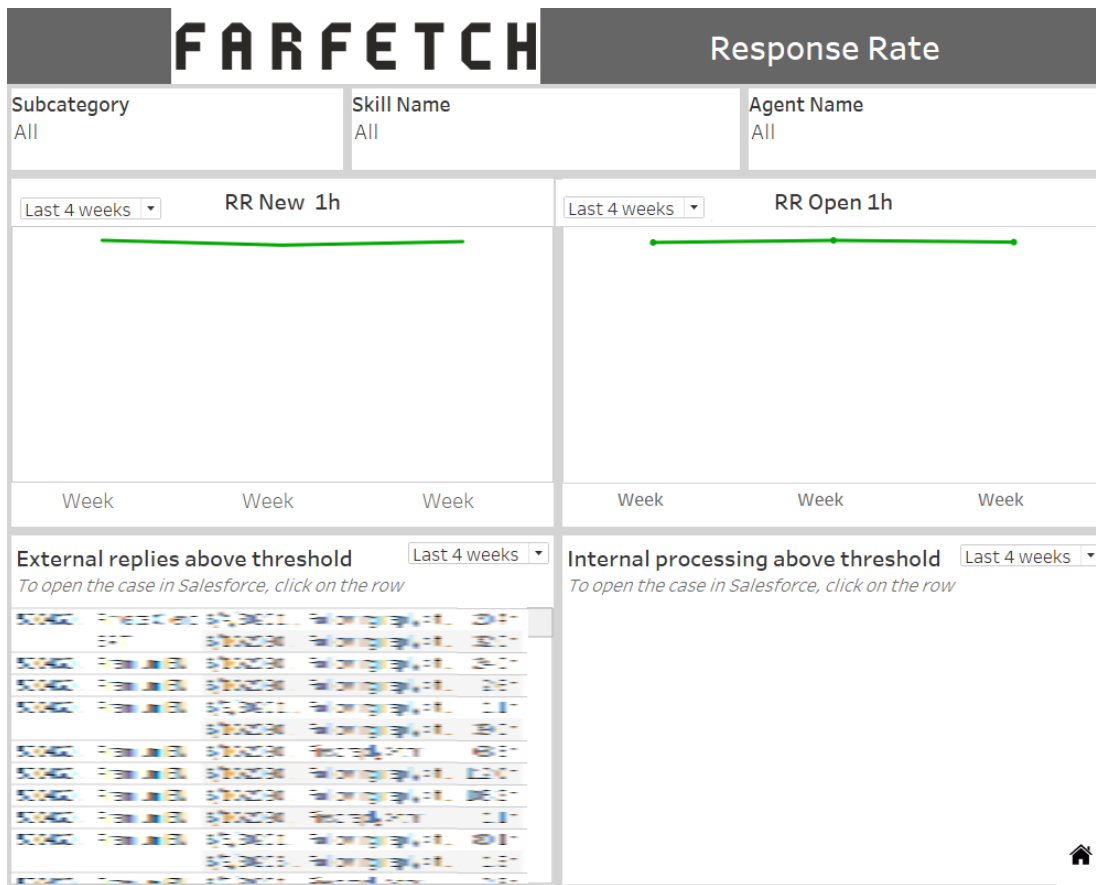


Figure 4.7: RR drilldown

In order to highlight the cases that have not complied with the SLAs, a list of those cases is shown and a link to the Salesforce can be accessed so that the user can further investigate them. This list of cases is divided in internal processing and external replies, this way the user can understand where the problem is. Internal processing are the cases that come from other Farfetch's teams and are managed internally. External replies are the cases that come from external entities and where an email reply is necessary.

4.3.3.4 Agents drilldown

The user can further investigate the agents performance, since in the mission control room, only the week averages are shown. As shown in Figure 4.8, the agents dashboard will show the information on the several interactions an agent can have when managing cases. The information will be displayed by agent and by week and it can be filtered using those two filters as well. The metrics shown are the number of cases created, the number of cases handled, the number of emails, the number of posts, the number of comments, the total number of interactions and the interactions per day and per case. The average of all the agents is shown in the bottom, and the code color

shows the agents that are currently 5% or more below average (red), above or below less than 5% of the average (yellow), and 5% or more above average (green) on that given metric.

Agent Name		Agents Interactions							
Agent ..	Week ..	Cases	Cases	Emails	Feed post	Feed	# Interactio	Int/Case	Int/day
Ana H.	Week ..	26	257	95	205	2	322	1.25	161.20
Andrei.	Week ..	165	325	122	766	15	1038	1.31	161.33
Argal.	Week ..	4	32	1	34	0	38	1.09	7.60
Ariel Wu	Week ..	57	358	87	360	7	531	1.48	83.90
Catar ..	Week ..	36	290	30	304	5	445	1.53	143.33
Filipe ..	Week ..	3	265	233	39	0	230	1.06	55.90
Jerar ..	Week ..	42	305	72	304	0	418	1.38	83.57
Jcana.	Week ..	30	422	111	453	5	635	1.50	127.20
Jcana.	Week ..	103	572	111	753	35	1022	1.75	301.40
José R.	Week ..	33	405	139	342	2	544	1.34	135.20
Lisa G.	Week ..	35	217	46	255	21	230	1.52	65.90
Merio.	Week ..	30	255	43	313	4	330	1.53	73.90
Rodrig.	Week ..	40	276	46	314	8	428	1.48	81.90
Sara C.	Week ..	44	445	155	362	2	574	1.38	85.57
Steve ..	Week ..	1	12	1	11	1	15	1.08	2.60
Witer S.	Week ..	38	371	140	254	5	457	1.26	83.40
Grand Total		47.75	532.125	90.4375	322.6375	5.9675	488	2.11	55.57

Figure 4.8: Agents drilldown

In the future, the proactive metrics should be added to this dashboard, inserting three more columns, the number of orders seen, the number of proactive cases created and the time spent on those files.

4.3.3.5 FRT drilldown

When analysing the FRT, the user can find, in the first section of the FRT dashboard, the evolution of this metric on a given time period and the list of cases that did not respect the 72h SLA, with a direct link to Salesforce. In the second section, a list of subcategories with the average time spent on each status is presented. And in the third, the FRT status breakdown with the amount of time in each status is displayed on a chart, as shown in Figure 4.9.

In this dashboard, the most important filter is the subcategory filter, since depending on the subcategory, cases can take more or less time to be solved.

The list of subcategories and the time spent on each status, gives the user the chance to understand if a given subcategory is behaving above (green) or below (red) the target. More than that, it helps to understand whether the time is being spent when the case is on the team’s side (New, Open and

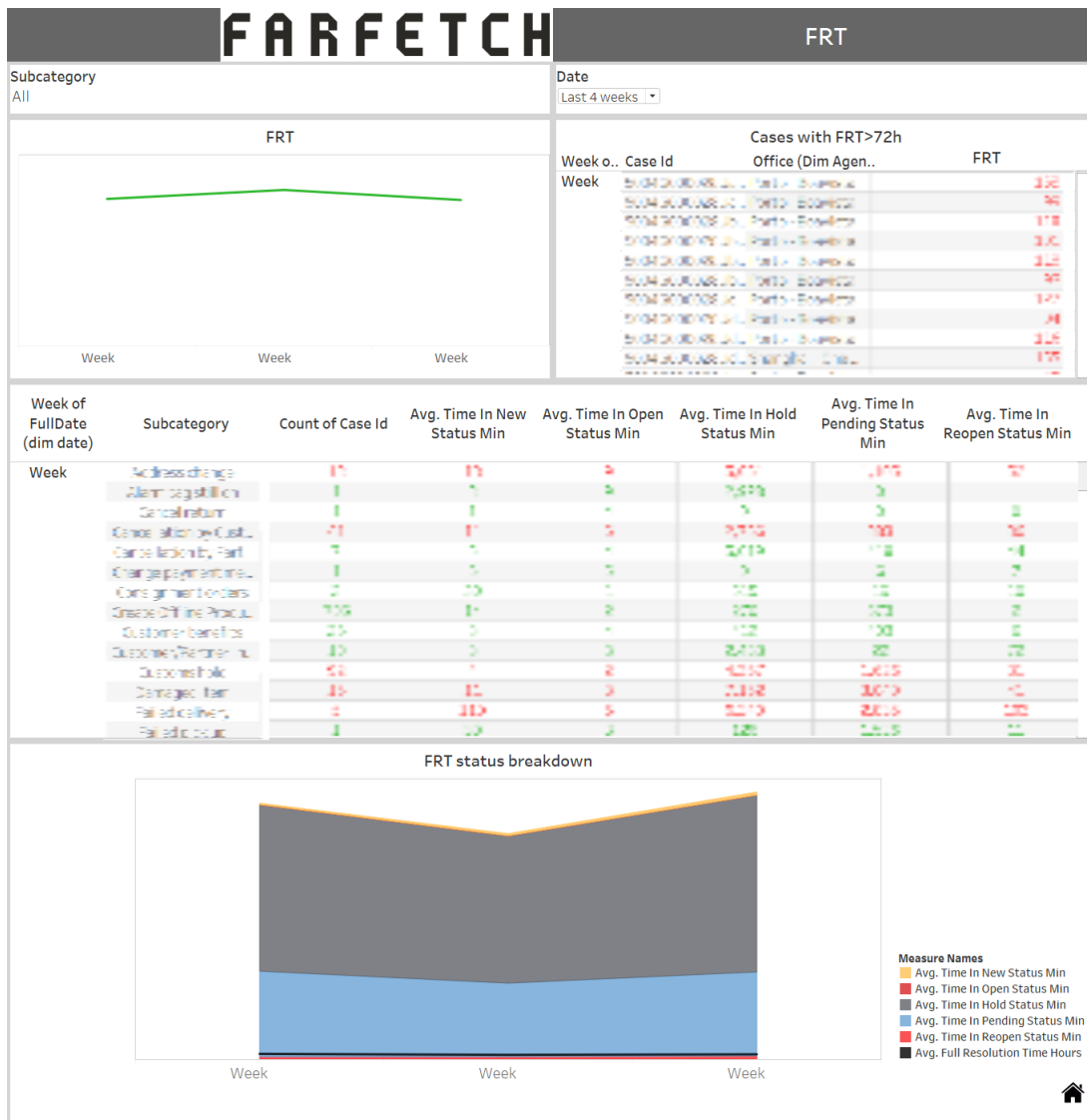


Figure 4.9: FRT drilldown

Reopen status), or on other team’s/stylists’ side (On Hold, Pending status). This information is very useful for the analysts working on ways to improve the FRT.

The list of cases that did not respect the SLA is particularly important for the supervisors to understand the problem and show it to the agents with a specific case example, so that it does not happen in the future.

4.3.3.6 Clients drilldown

When the user wants to understand not only the total number of FF-Access-Private-Client clients but also the evolution of that number, it is possible to analyse the clients dashboard. The dashboard presented in Figure 4.10 is divided in two main sections, on the left the number of clients added

pattern and the evolution on the last weeks. As well as the clients widget, where he can further explore which clients have dropped and find a justification for that.

If the stakeholder is an analyst or the Premium Service supervisor, he will be more focused on the team overall performance.

For example, if the RR on a given week is low, and the user notices, on the work sources widget, that the number of orders was higher than usual, he will conclude that the number of cases received was higher than the number of cases forecasted, hence, the forecast accuracy will be bad, and it can justify the bad result on the RR metric due to a lack of headcount to respond to the given demand on that specific week. If no justification is found immediately, just by observing the other widgets, the user can click on the RR widget, diving into the RR dashboard, and understanding which are the cases that are making the RR drop and further investigate them on Salesforce in order to find the origin of the problem.

On other perspective, if the user wants to explore the agents performance he can look at the agents performance widget where the averages of the week are shown and then deep dive into the individual performance of each agent, in order to give him feedback to improve his performance.

If an analyst wants to explore the reasons behind a certain FRT value, by clicking in the FRT widget, he will be able to understand how much of that time is spent in each status and make some adjustments in the process, internally and with other teams. Besides that, the user will also be able to understand which cases did not respect the SLA. And if the user is the supervisor, he can give immediate feedback to the agents in order to correct possible systematic errors and delays.

At last, if the supervisor is interested in controlling the proactive and monitoring work, he can understand how the team is doing in this specific tasks and adjust the processes in order to enhance performance.

Table 4.4: Use cases

Stakeholder	Use case	Focus sections	Deep dive
Forecast team member	Forecast accuracy analysis	Work Sources	Work Sources - to explore forecast accuracy
High management	Business performance analysis	Financial and Clients	Clients - to understand the reason behind dropping clients
Analyst, Team Supervisor	Team performance analysis - Case Management	Case Management Performance	RR, FRT - to understand the team's capacity to fulfill the clients needs respecting the SLAs
Analyst, Team Supervisor	Team performance analysis - Agents performance	Agents Performance	Agents individual performance - to explore the individual performance of each agent comparing it to the average performance
Analyst, Team Supervisor	Team performance analysis - Proactive work	Proactive Work Performance	-
Analyst, Team Supervisor	Team performance analysis - Monitoring work	Monitoring Work Performance	-

These are some of the many use cases that this dashboard provides, and it represents its versatility and its wide coverage of the WFO teams metrics. It is important to refer that every analysis on a specific section is complemented with all the information displayed in all the other sections and more general analysis, taking into account only at the big picture, can be performed as well.

Chapter 5

Conclusion and Future Work

In such a competitive industry like the E-commerce industry, it is of vital importance to provide and maintain a high quality service to the clients, that gains even more importance when those clients are Premium clients (FF-Access-Private-Client). In order for the company to deliver it, it is of primary importance to have the best support teams since they are the face of the company when helping the clients.

As the markets get more and more competitive, the efficiency is fundamental for an organisation to thrive. The recently formed Premium Service team at Farfetch represented a good opportunity for the Workforce Optimization (WFO) team to implement some good practices in order for this team to achieve the best performance possible, being effective and efficient at the same time. Bearing this in mind, the goal of the project was to bring more and better information to the WFO team, so that the most accurate data was fed into the Workforce Management (WFM) cycle, and the WFO team could continuously improve its support work. Besides that, the Premium Service team's performance would also benefit from this, since there was a standardization of all the team's work, through the process mapping of all the activities, and the creation of performance monitors, that are expected to help the team controlling its performance, looking for the best results possible.

In order to achieve this, all the agents actions were mapped, problems were identified and tackled, metrics were created/reformulated and finally dashboards were developed. This way, the transition from day to day activities into business processes and from business processes, into business intelligence, was ensured. Now, it is up to the stakeholders to use the intelligence generated, in order to gain a competitive advantage, making the team deliver a high quality service and becoming more efficient, to thrive in this competitive market.

After the mapping of all the agents actions, case categorization problems were identified and tackled, resulting on more accurate data for the WFO team. In fact as it was, every analysis based on the number of cases at the category level was biased, namely in the "Customs Hold" subcategory by 9%, in the "Tracking Information" subcategory by 507,2% , in the "Order Delay" subcategory by 24,3% and in the "Status Request" subcategory by 11%. All this differences represent more reliable and accurate data that was obtained not only from the process mapping but also from the correction of the case categorization.

Another encountered problem was the fact that the proactive work and monitoring work, performed by the team outside Salesforce, were not being measured. This was tackled by the creation of a set of metrics that fully translate the work of the agents when performing these manual tasks. Having this work measured will allow the team to understand their performance, and continuously improve it. In addition, this metrics will improve the forecast assumptions on the headcount needed for the team to manage the proactive and monitoring work.

The team also lacked a reliable daily report that showed the performance during the last days. A solution was built through the creation of the daily report, where the main performance metrics are presented. This dashboard revealed to be very useful not only for the team to identify possible problems and tackled them as quickly as possible on the daily meetings, but also for the WFO teams, namely the scheduling and forecasting team, to spot some inefficiencies and tackled them as well. In fact this report was useful for the creation of a new shift on Saturdays which improved the team's performance on case response.

Finally, the 360° Workforce Reporting dashboard was built so that the relevant information could all be gathered in one place and the stakeholders could easily access it, and understand the way the team, and the business, is going, as quickly and effectively as possible. In fact the dashboard is built according to its user, if it is more operational, all the business related metrics, such as financial or clients related metrics are left aside. If the user is from high management then he can have the bigger picture and look into all the relevant metrics related to the team. This dashboard, not only gives the chance to understand the overall perspective, but also allows to investigate on deeper a level how the metrics are going, and if some issue is identified, it can be further explored in order to find its root cause. The level of detail is customisable according to the user being it its main advantage and that is why it is ready to support the business on the upcoming challenges to achieve its goals. In summary, this dashboard is expected to bring efficiency gains since all the information is in the same place, a quick analysis can be done and the solution of a hypothetical problem can be found. It is also expected to improve the Premium Service team's performance because it brings more information, namely on the proactive work, but also on all the other metrics since more information on them is available as well.

As future work, having all the process mapping of the agents activities, this is an excellent opportunity for the WFO team to perform process inefficiency analysis, in order to find the best way possible to deliver the Premium Service team's service. There is an ongoing project where the team is trying to understand the paths of a given process and understand the metrics behind it, using process mining. The mapping of all the actions, as well as the categorization revamp will be very useful for those analysis to be as accurate as possible.

Considering all the difficulties faced during the project implementation, another future step to improve the data accuracy would be to use the Omni-channel status in order to keep track of the time spent on the files.

In terms of the proactive files, it would be very important to proceed with a deeper and thorougher analysis on the impact of those files in the client experience. Metrics such as client retention, percentage of conversion (percentage of consequent orders every time a contact is established),

and customer satisfaction should be evaluated and if this reveals to have a big impact on the clients experience, then the performance of the team in these tasks should be closely monitored through the existing dashboards. Otherwise, it should be considered if it makes sense to continue the proactive work, weighting the pros and the cons of having headcount allocated to these manual tasks.

In terms of the agents performance, in the future, a quality metric should be implemented so that agents can be evaluated in terms of customer satisfaction. So far, it was not possible to do so, since there is no data available, concerning the FF-Access-Private-Client clients satisfaction, mainly because it is the stylists that communicate directly with the team.

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Appendix A

Processes

In this appendix, the processes mapped can be consulted, as well as a list of all the new categories and associated processes to be implemented in the near future. Following the client’s journey at Farfetch, presented in Figure 3.6, here are the main processes that the Premium Service team performs to deliver their service:

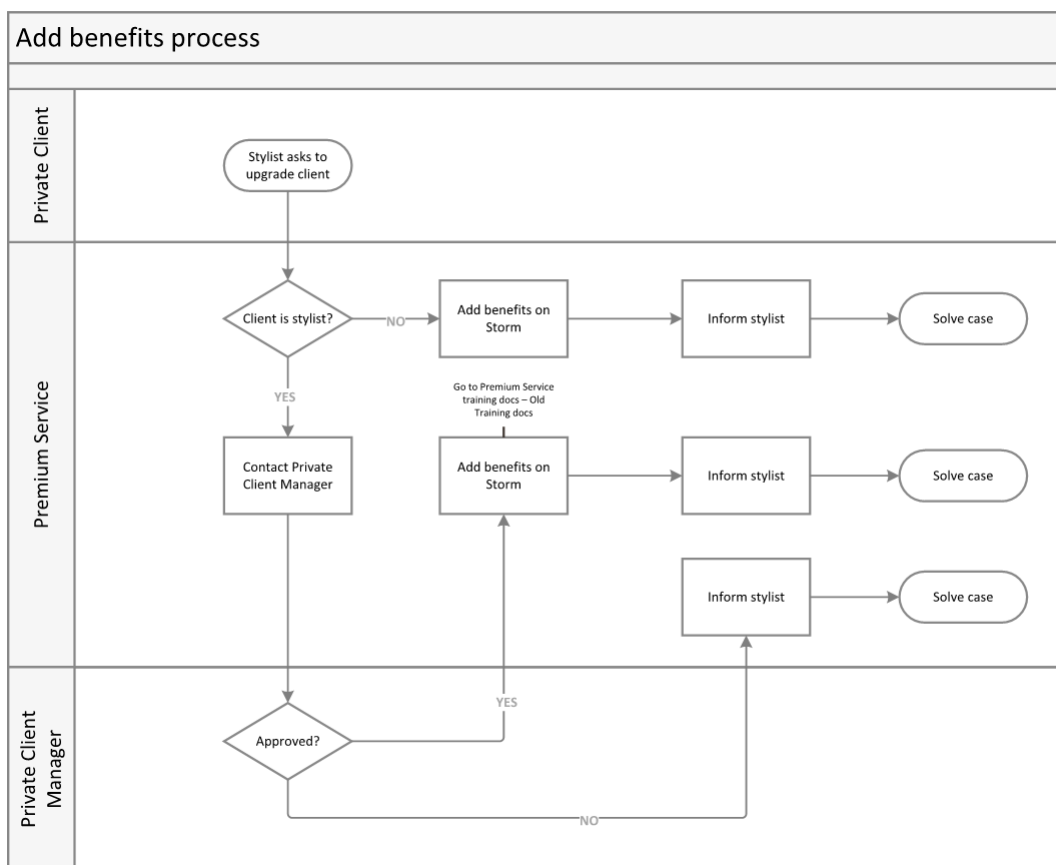


Figure A.1: Add Benefits process

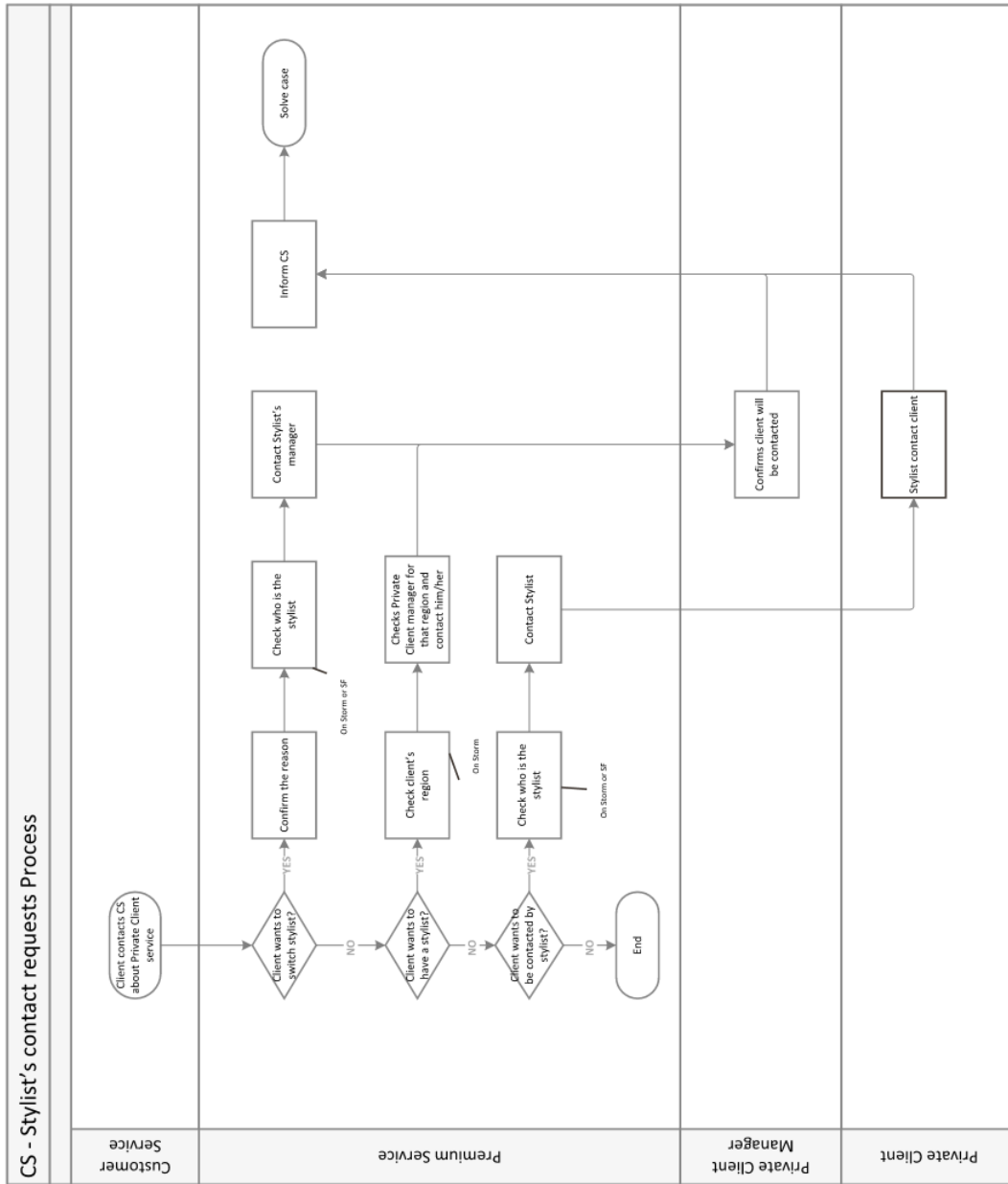


Figure A.2: Contact Stylist process

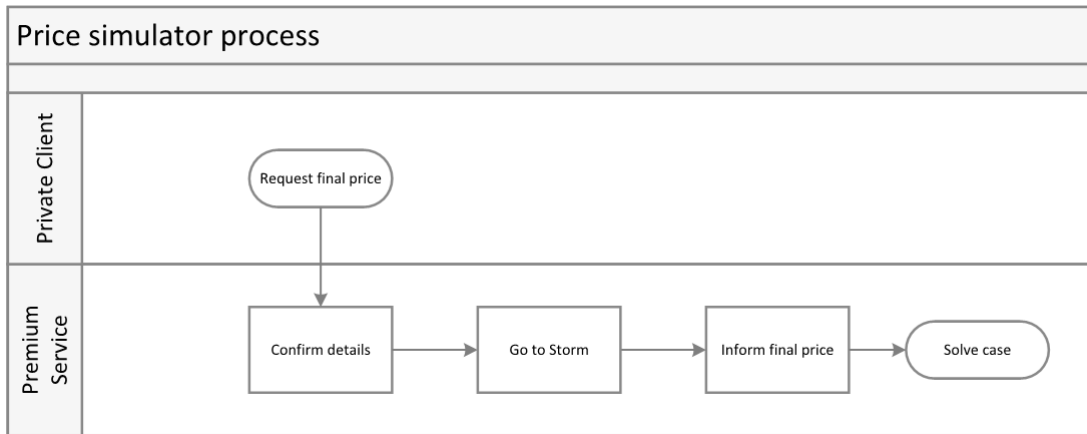


Figure A.3: Price Simulator process

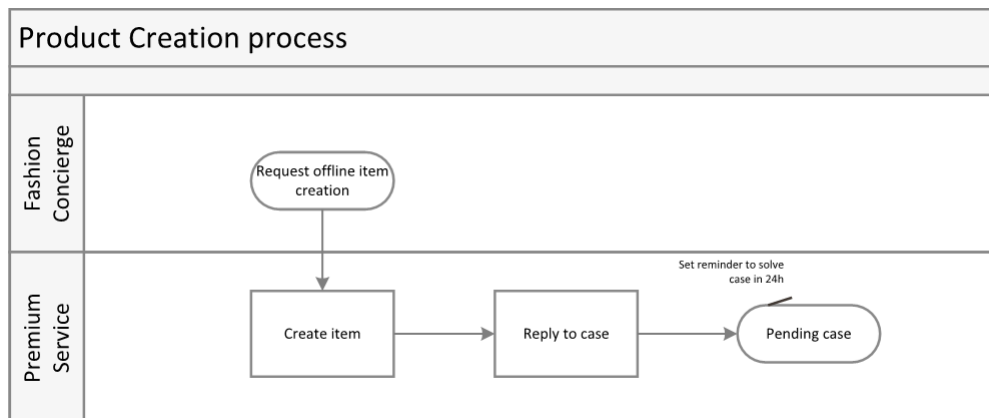


Figure A.4: Create Offline Product process

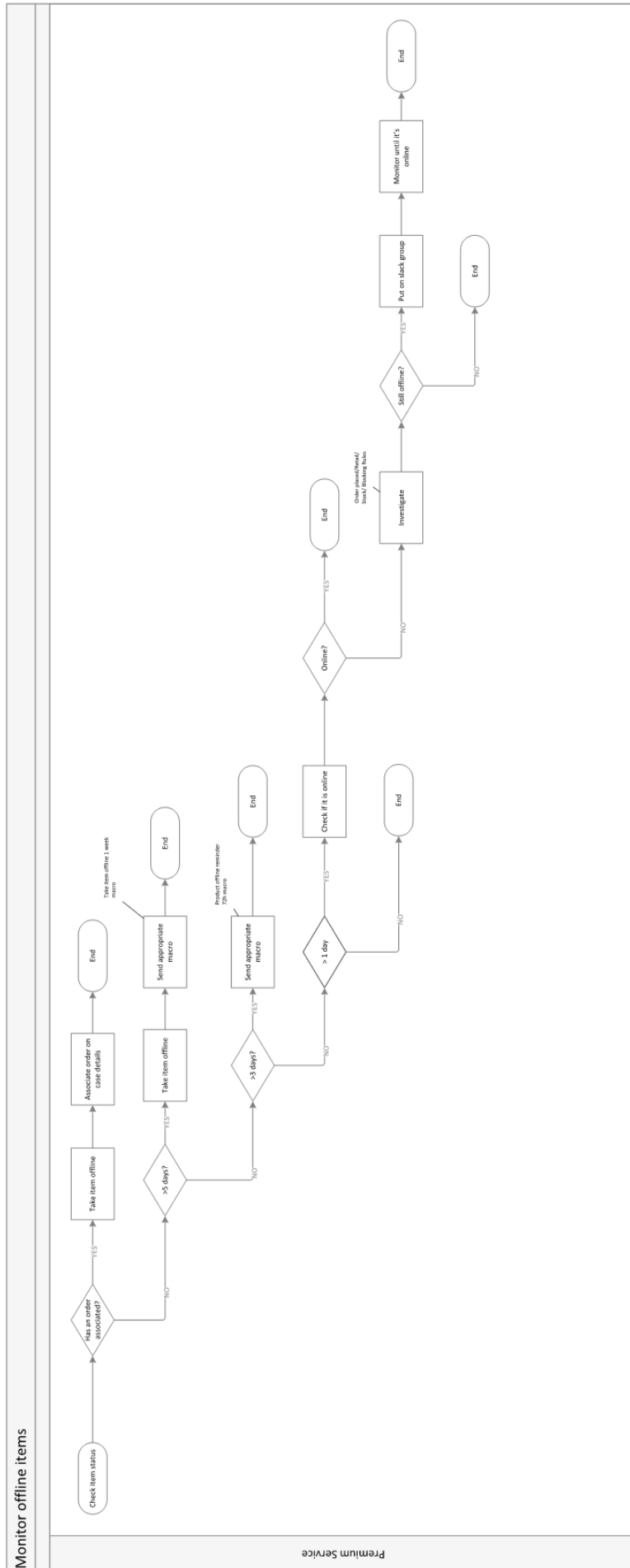


Figure A.5: Monitor Offline Items process

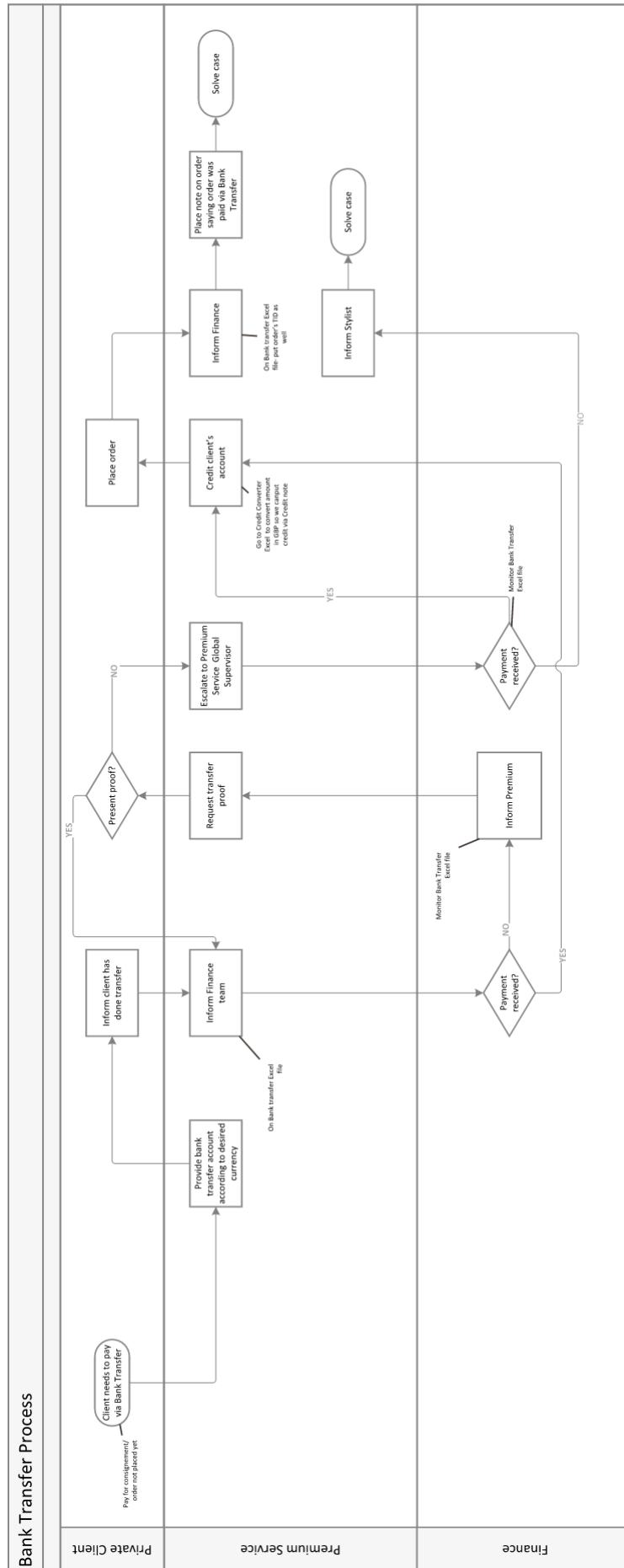


Figure A.6: Bank transfer process

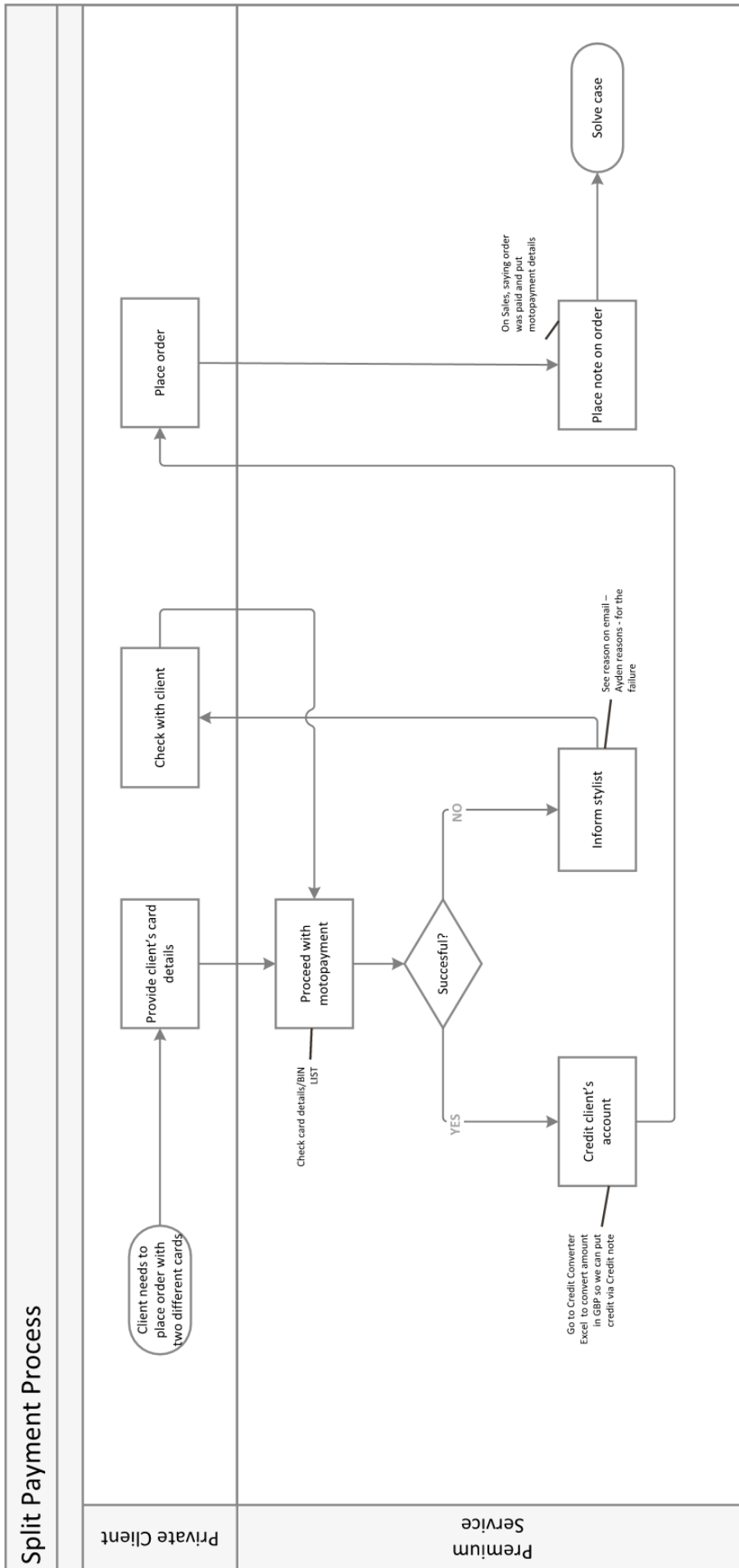


Figure A.7: Split Payment process

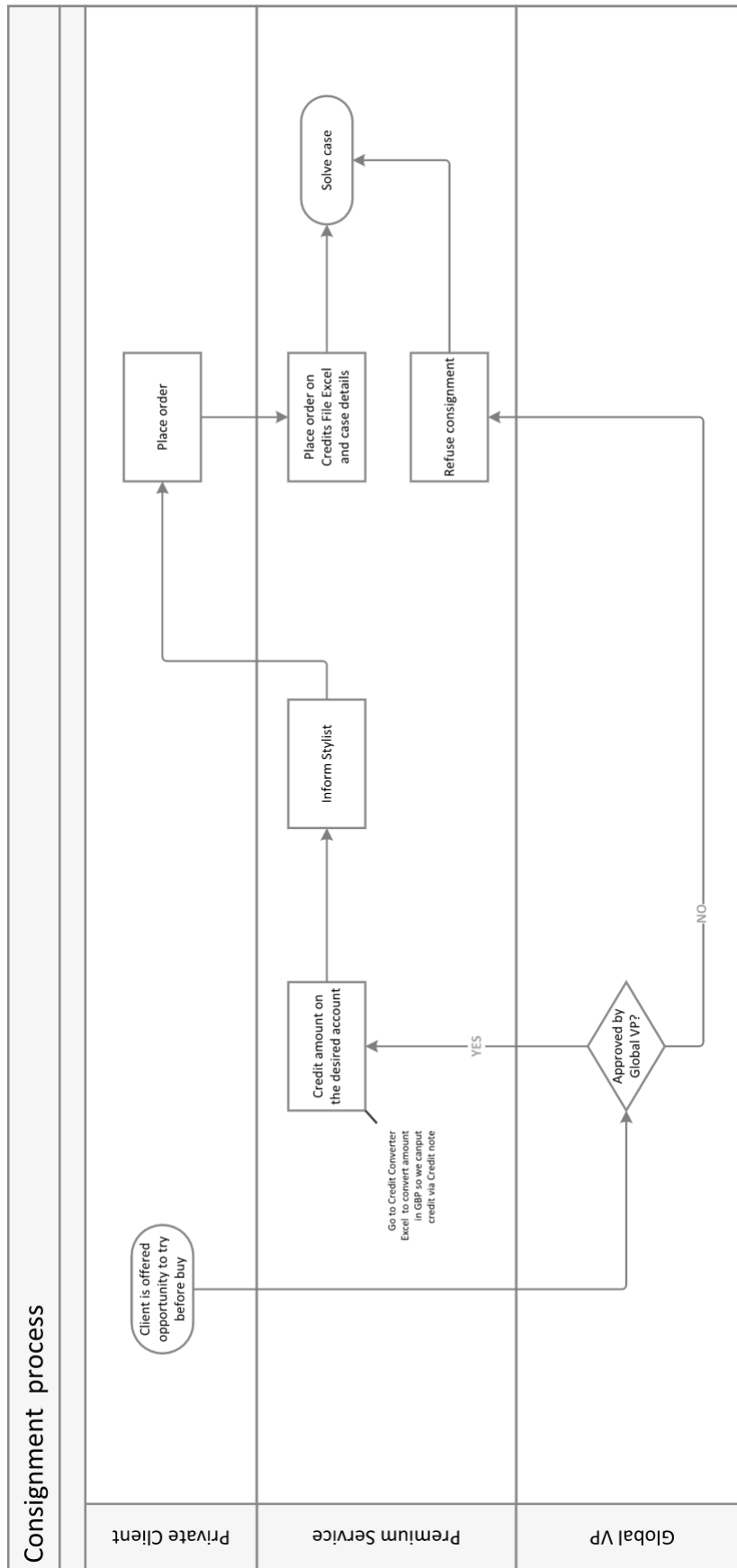


Figure A.8: Consignment Order process

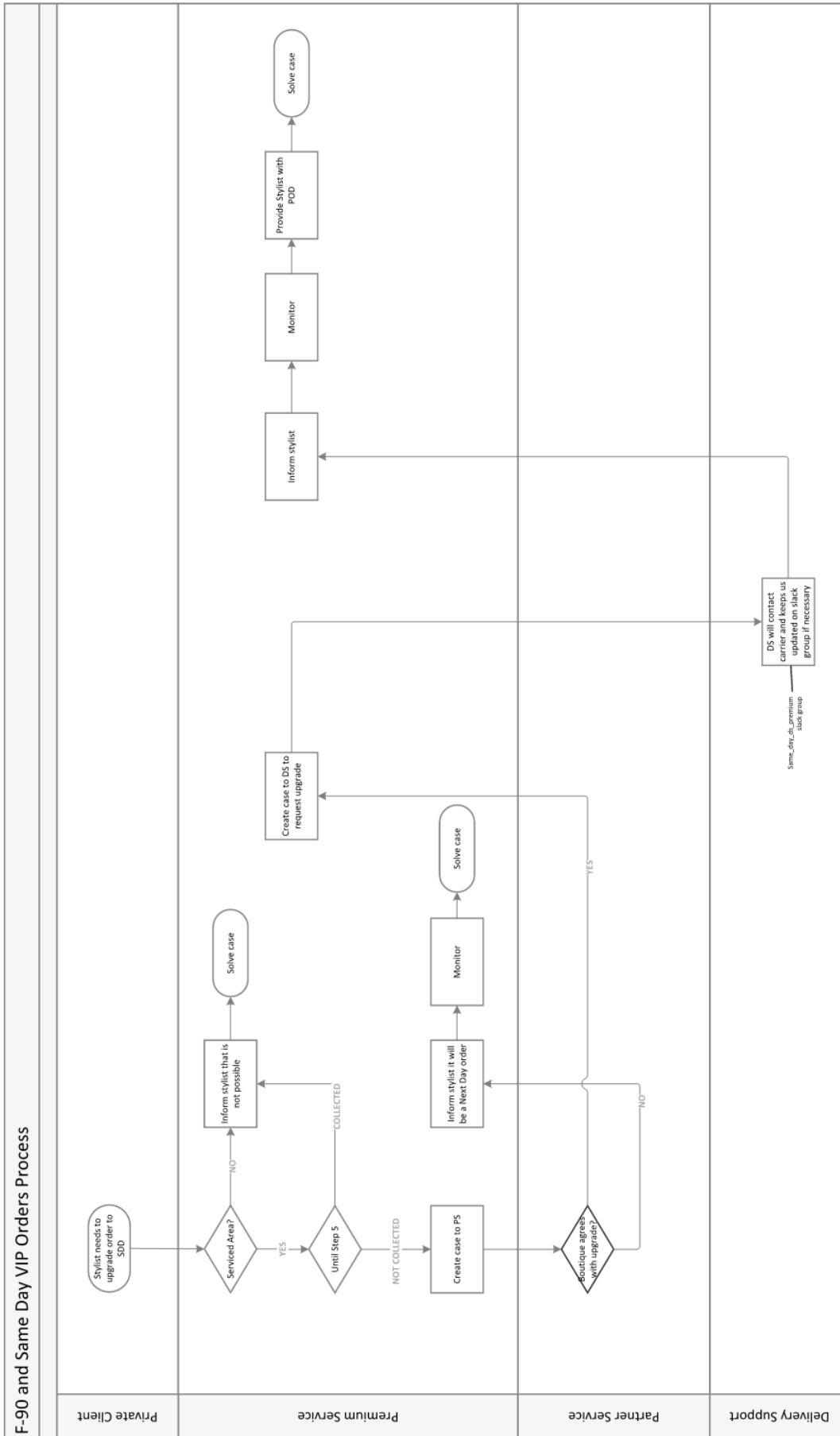


Figure A.9: Same Day Delivery process

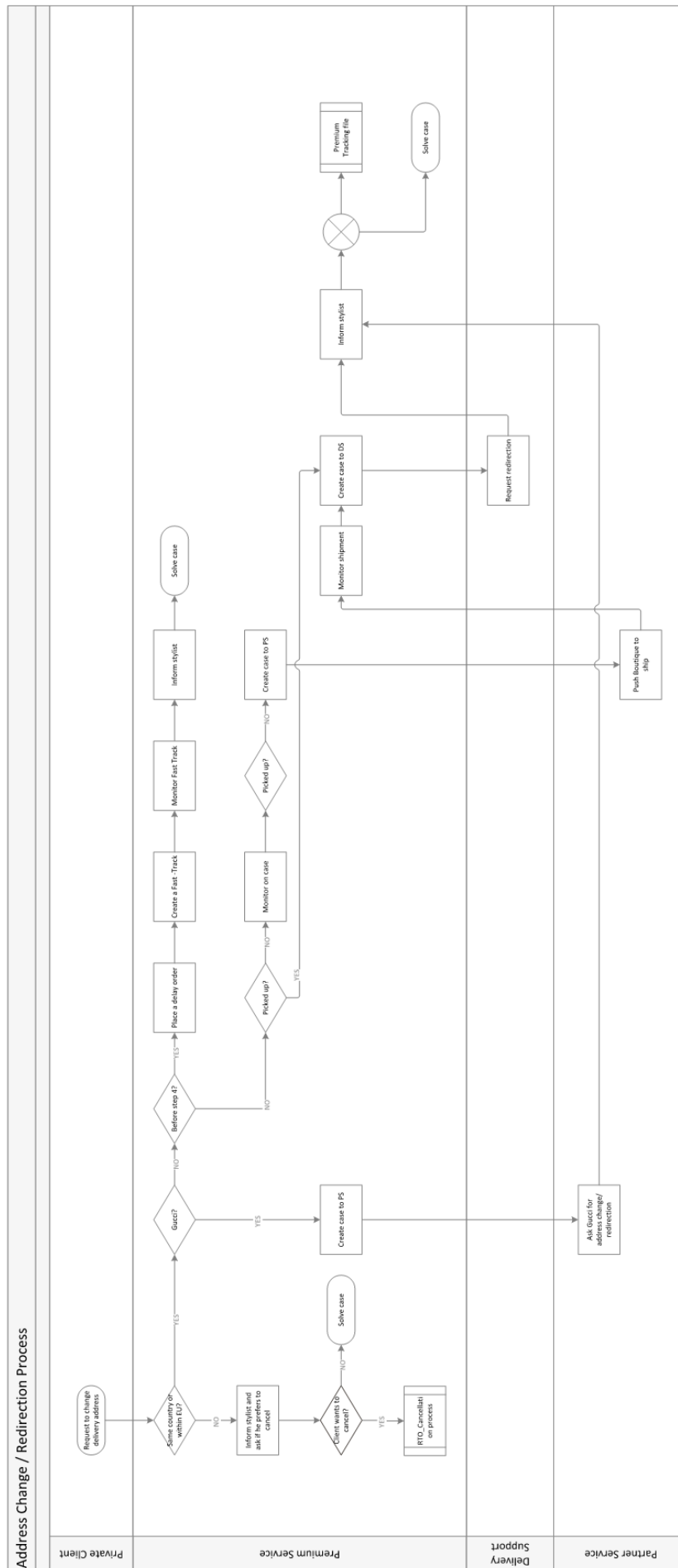


Figure A.10: Address Change / Redirection process

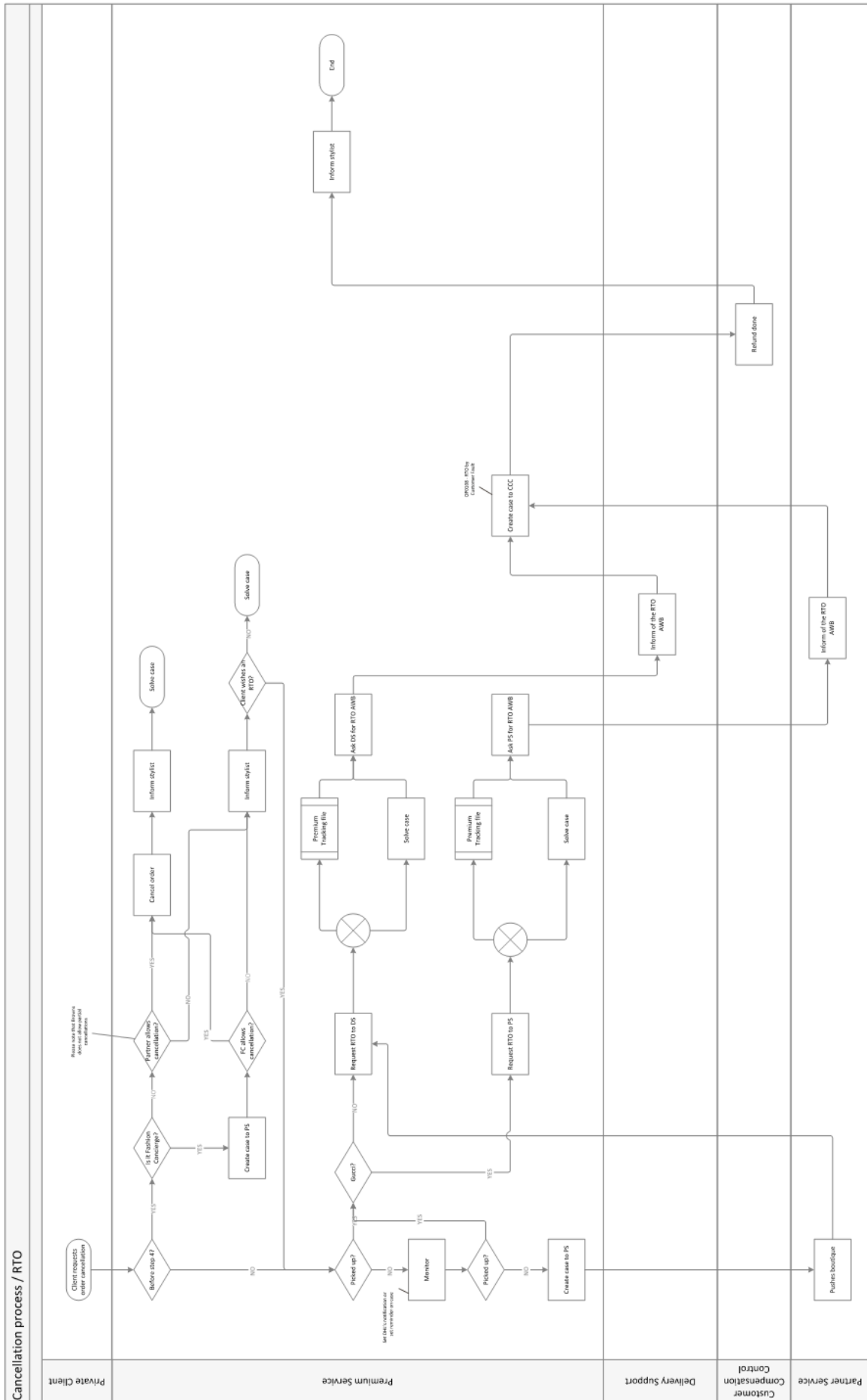


Figure A.11: Cancellation / RTO process

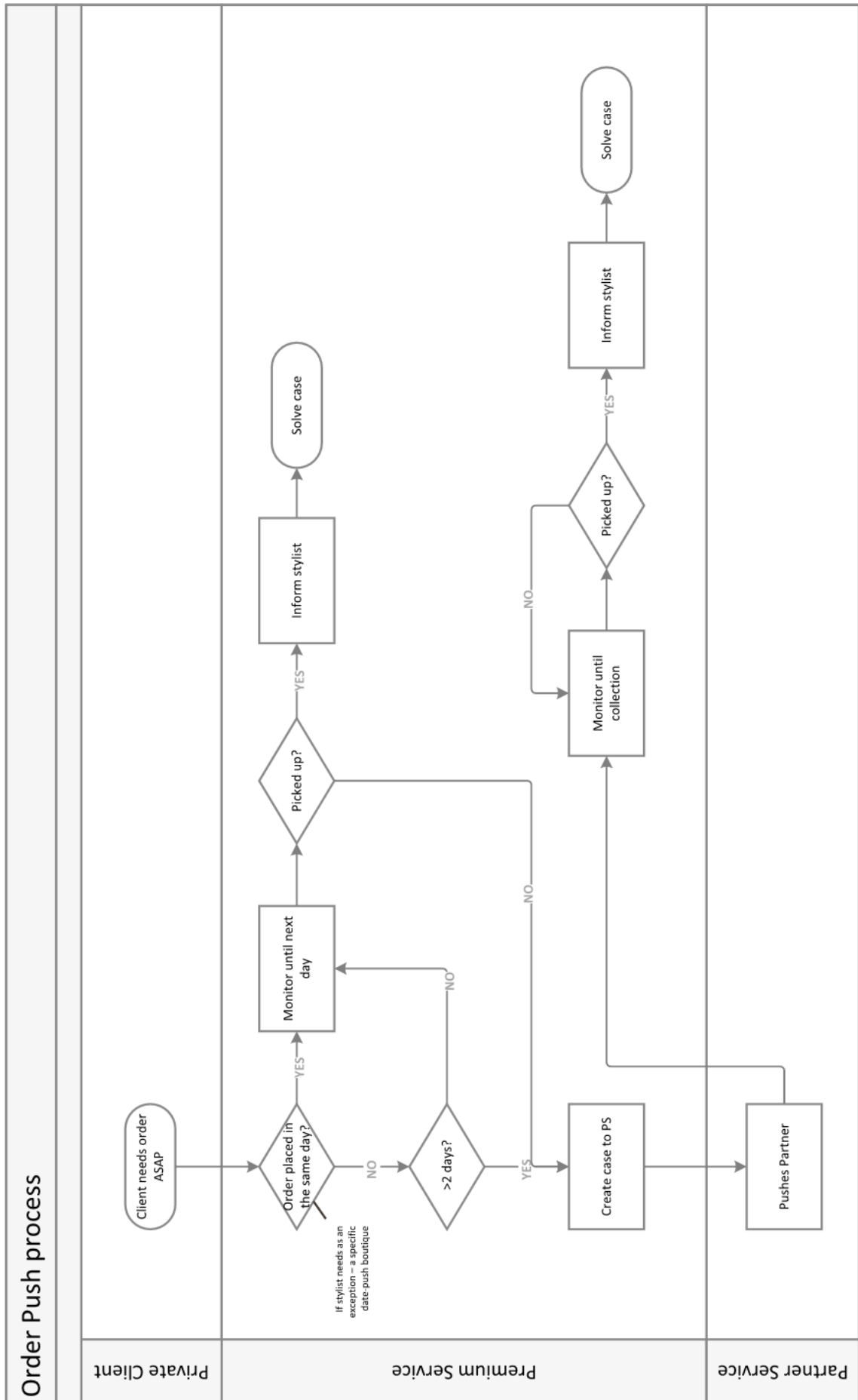


Figure A.12: Order Push process

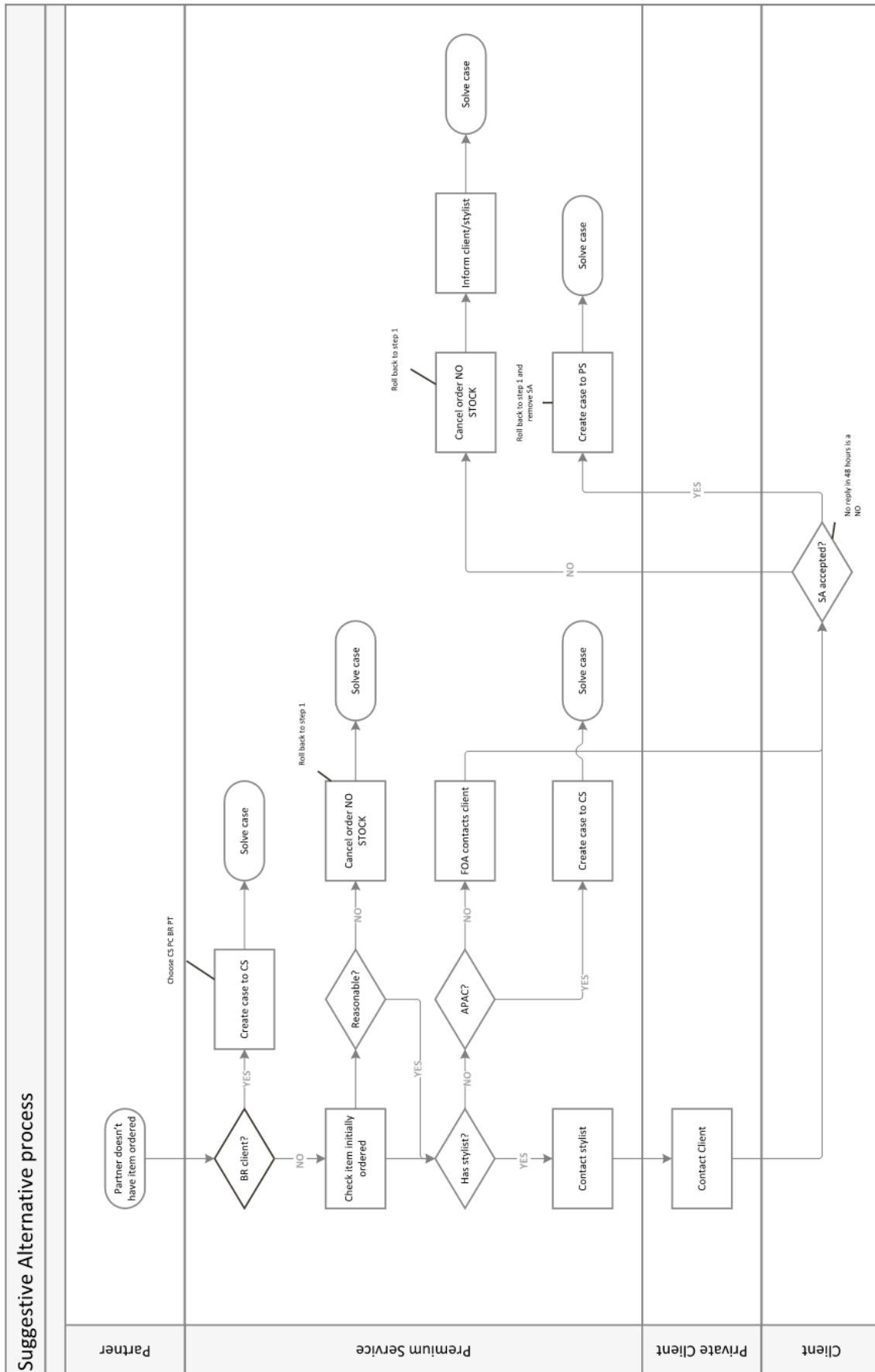


Figure A.13: Suggestive Alternative process

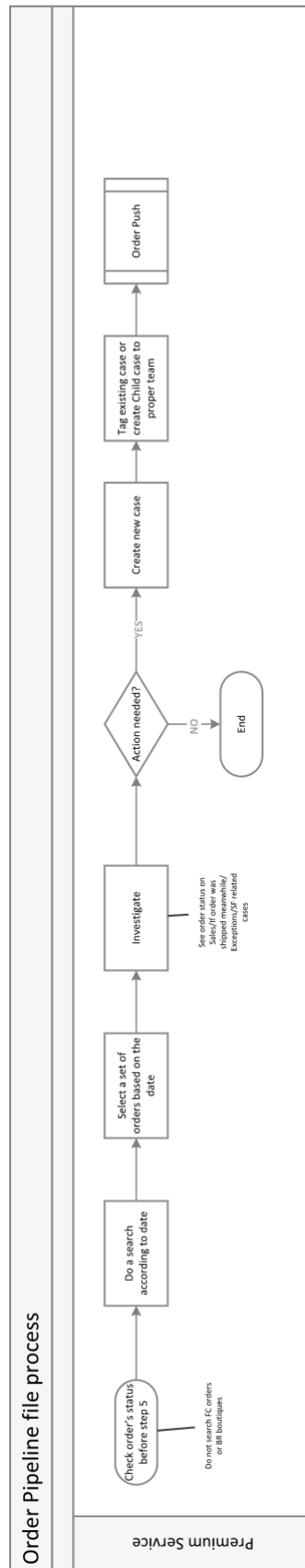


Figure A.14: Order Pipeline process

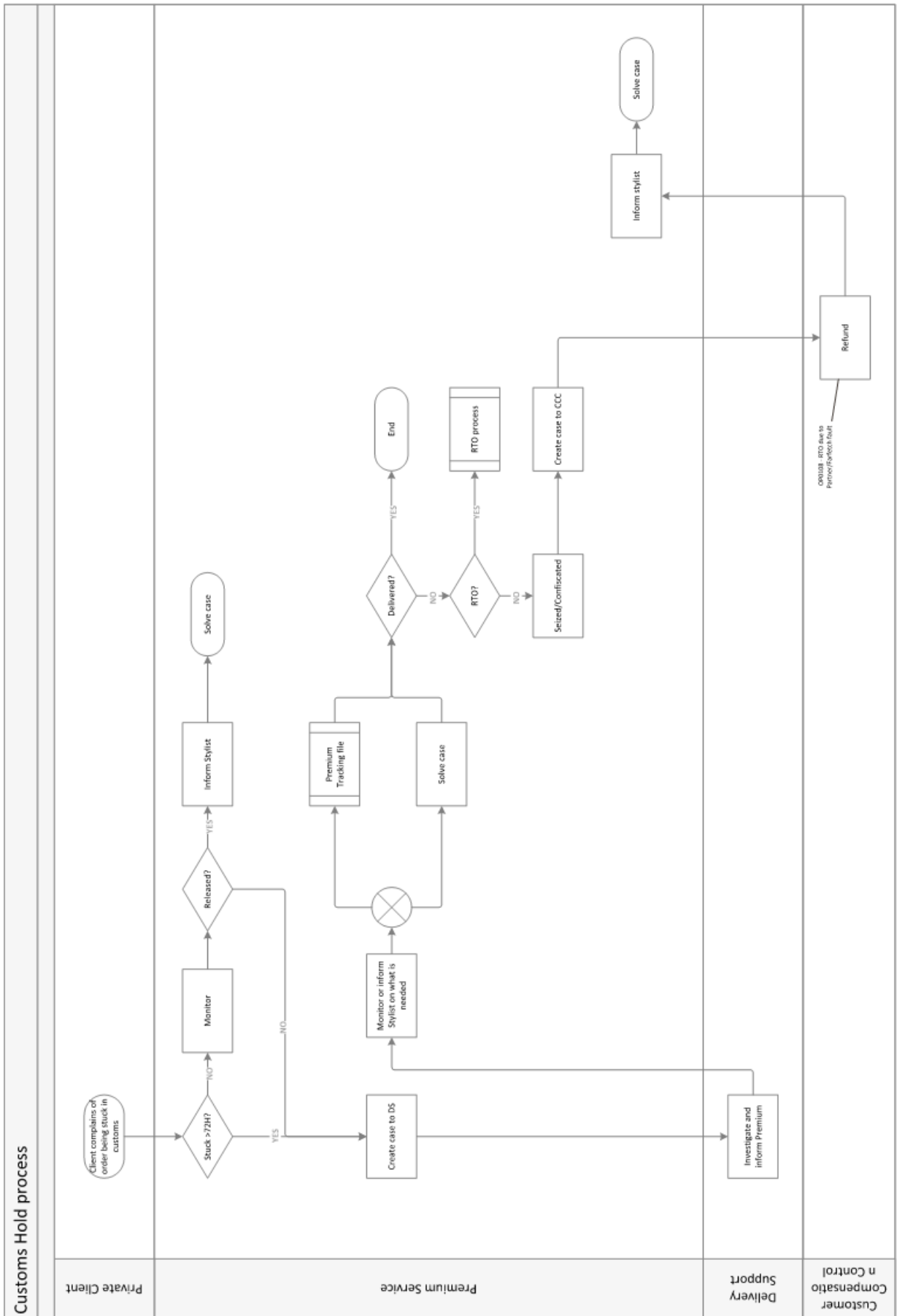


Figure A.15: Customs Hold process

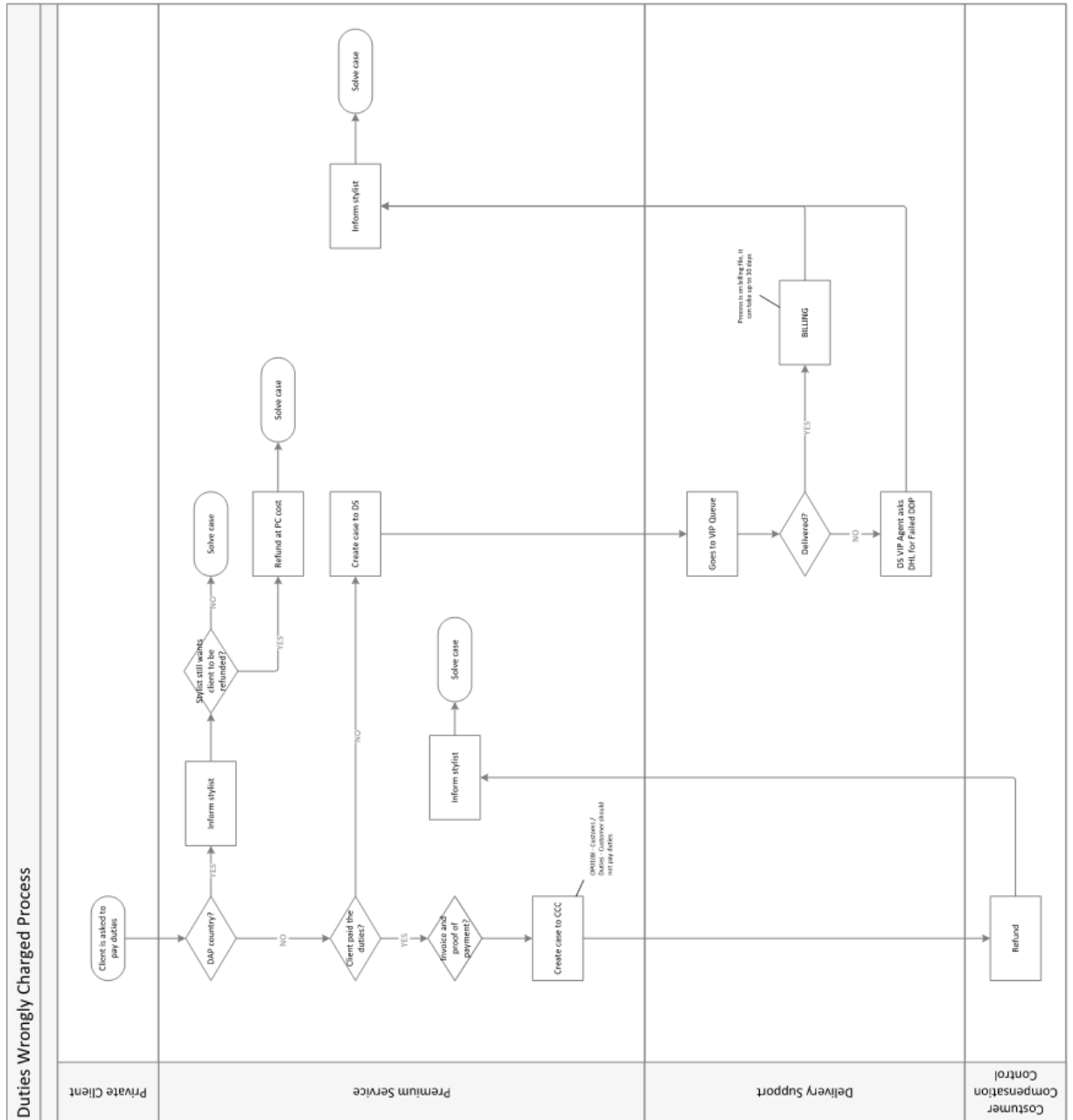


Figure A.16: Duties Wrongly Charged process

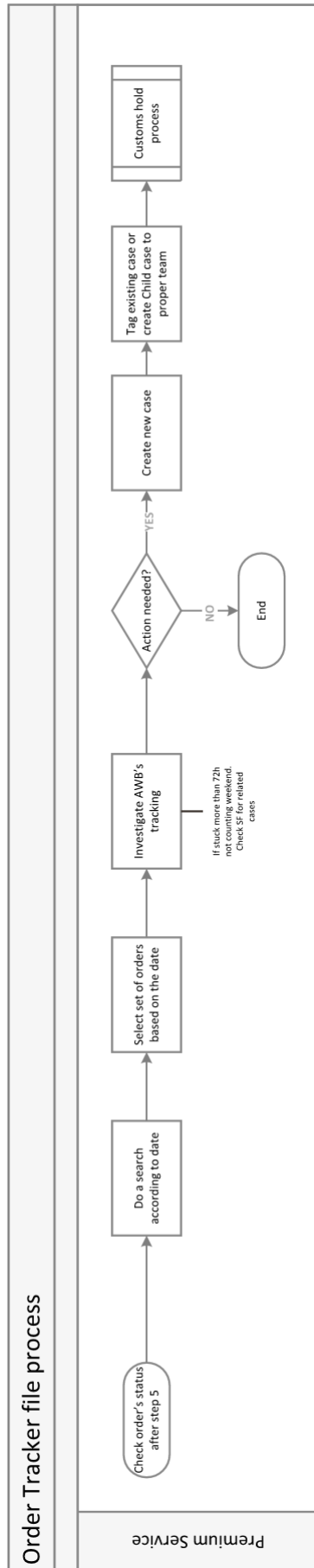


Figure A.17: Order Tracker process

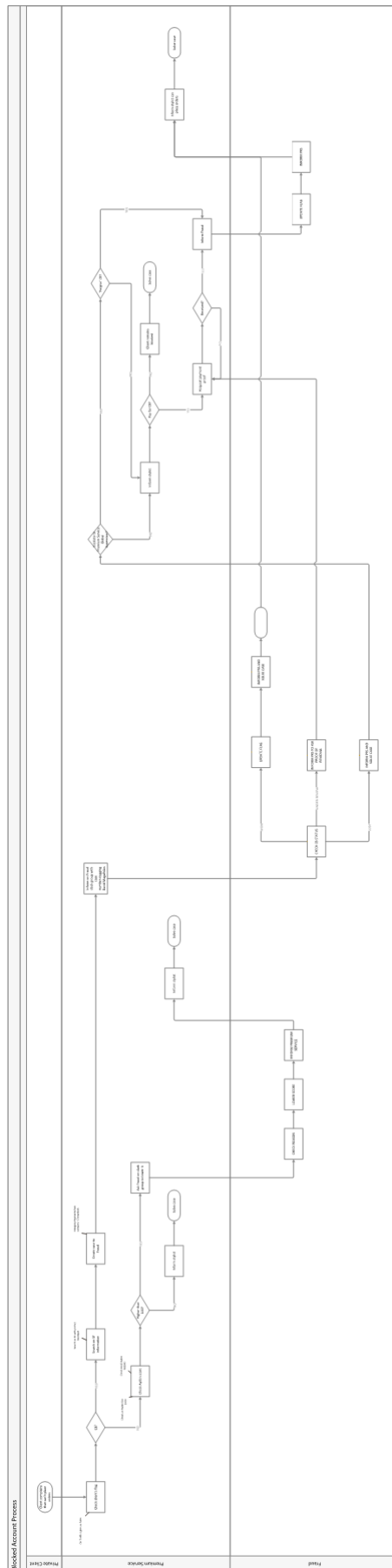


Figure A.18: Chargeback (blocked account) process

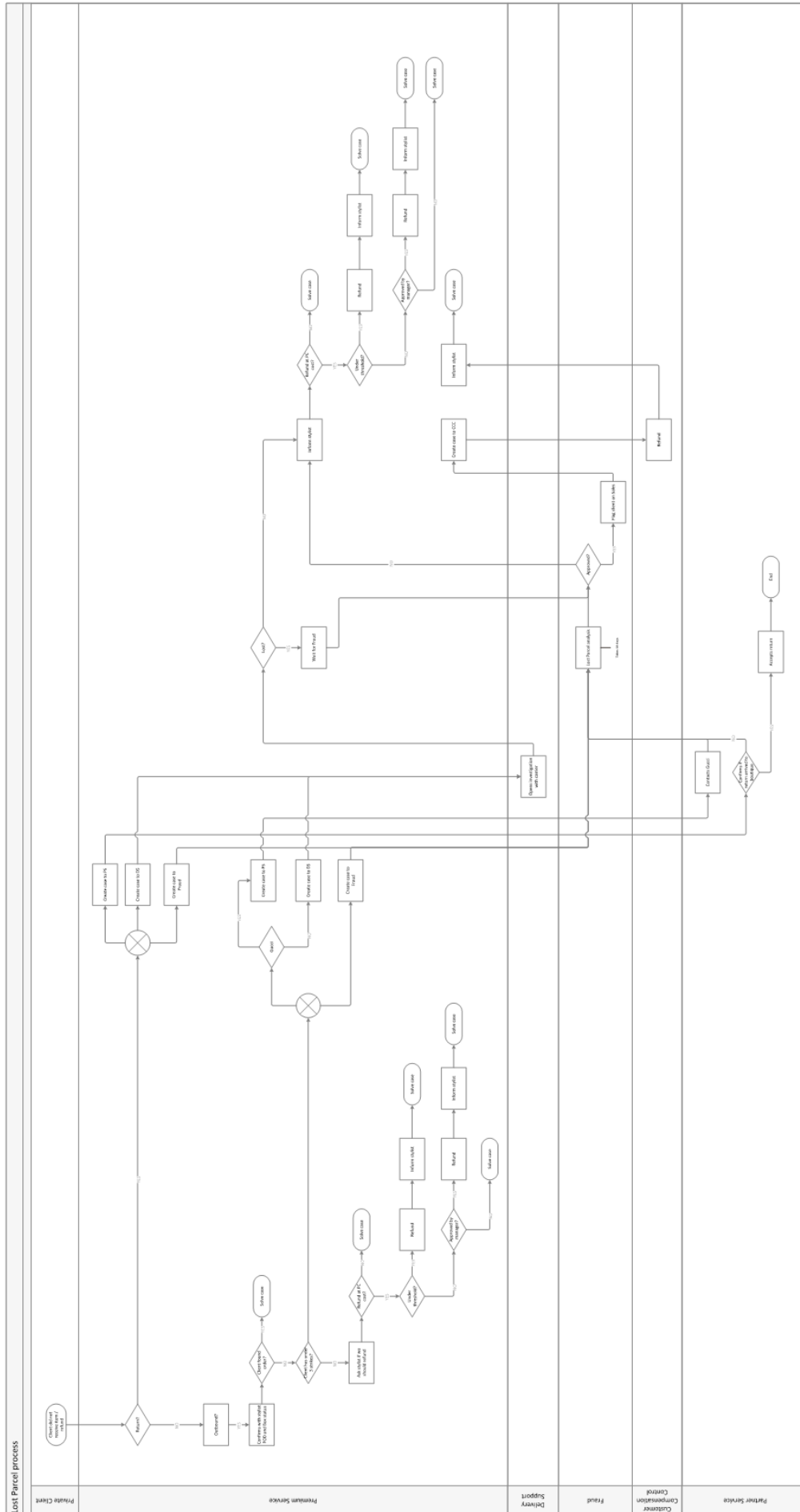


Figure A.19: Lost Parcel process

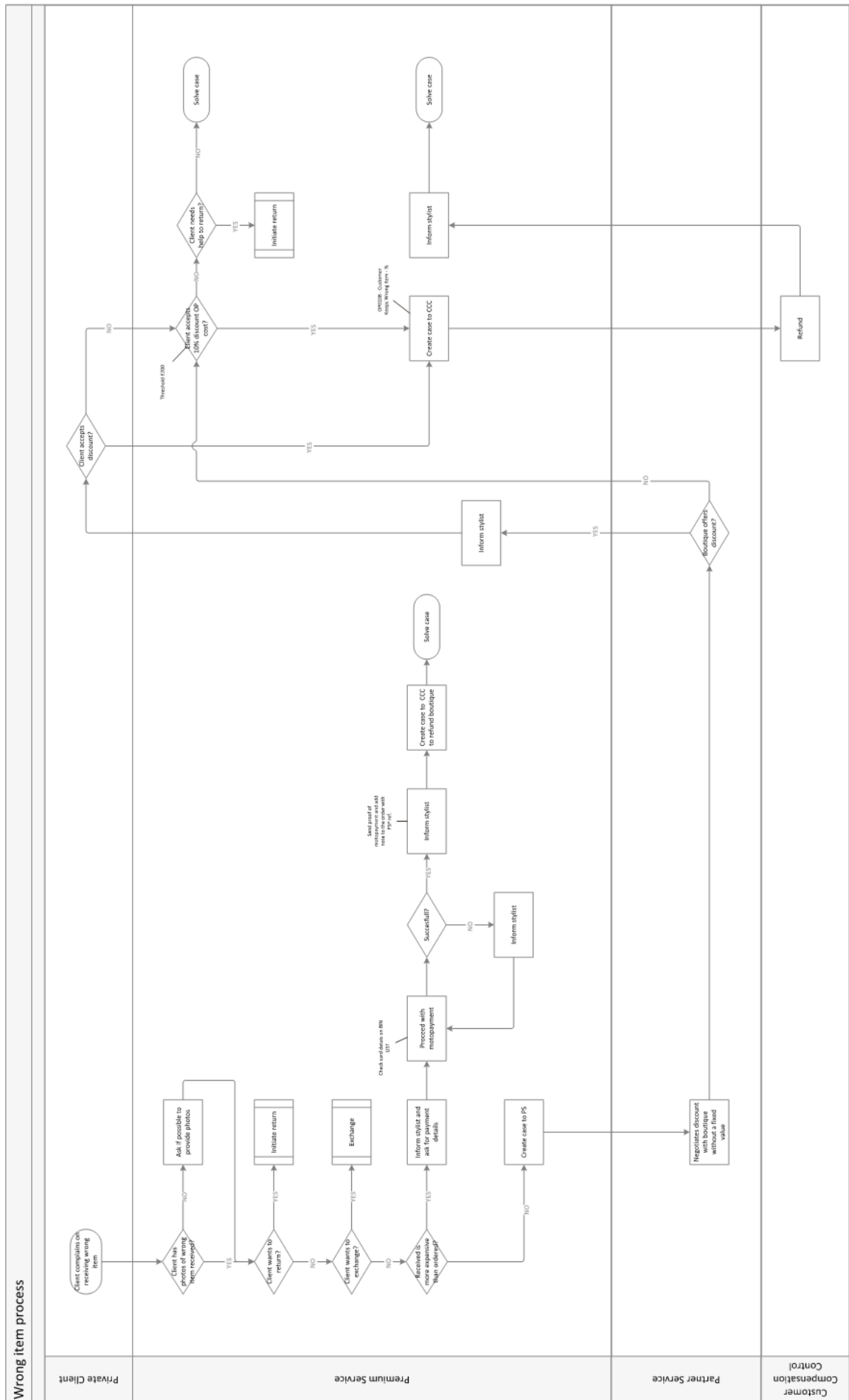


Figure A.20: Wrong Item process

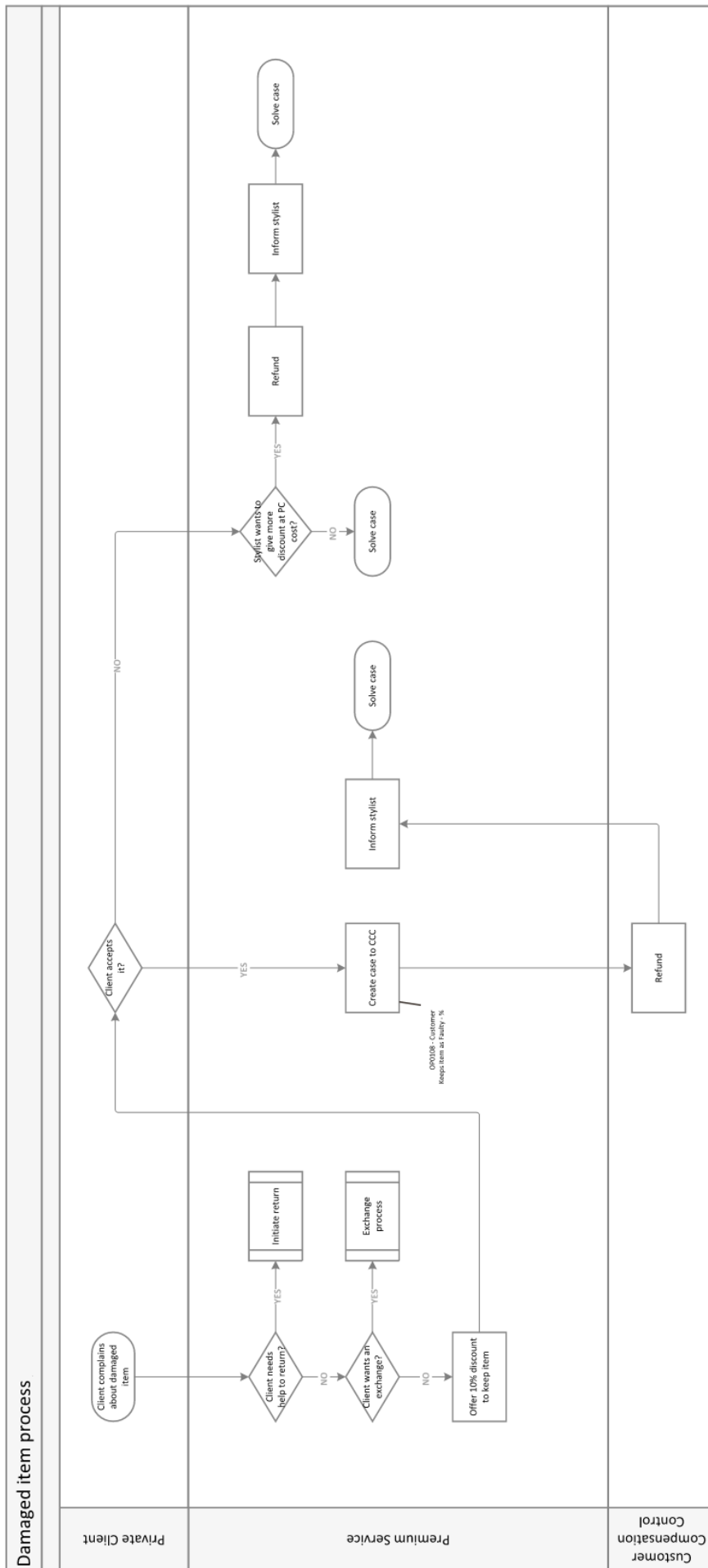


Figure A.21: Damaged Item process

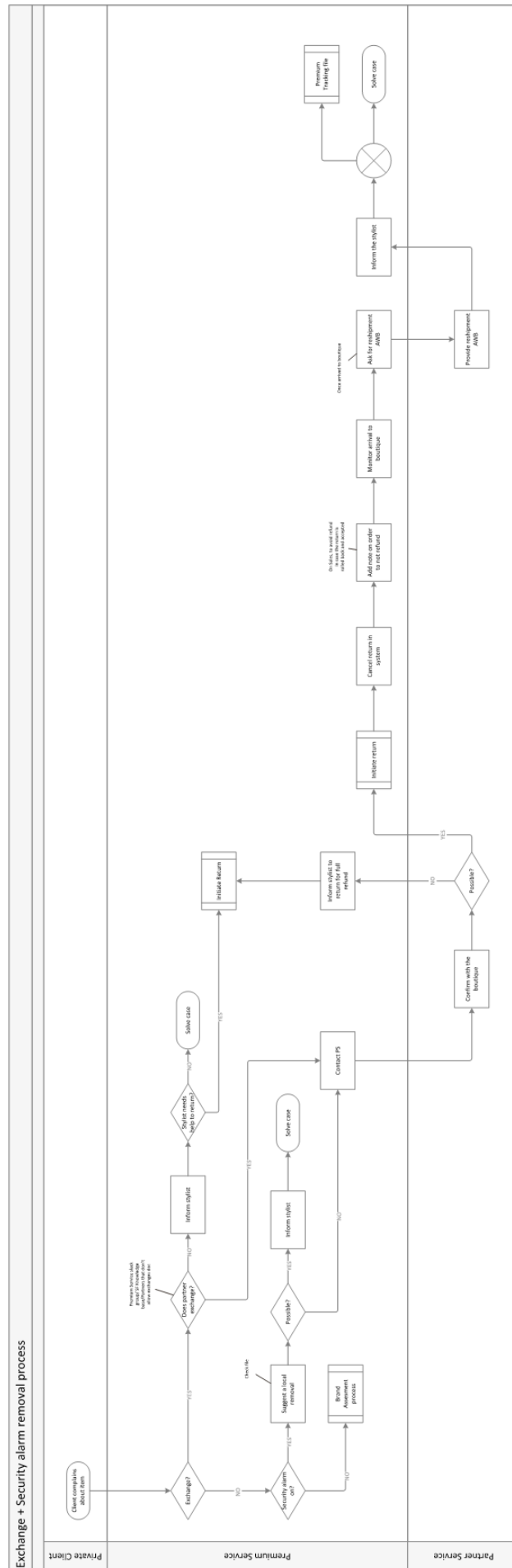


Figure A.22: Exchange and Security Alarm Removal process

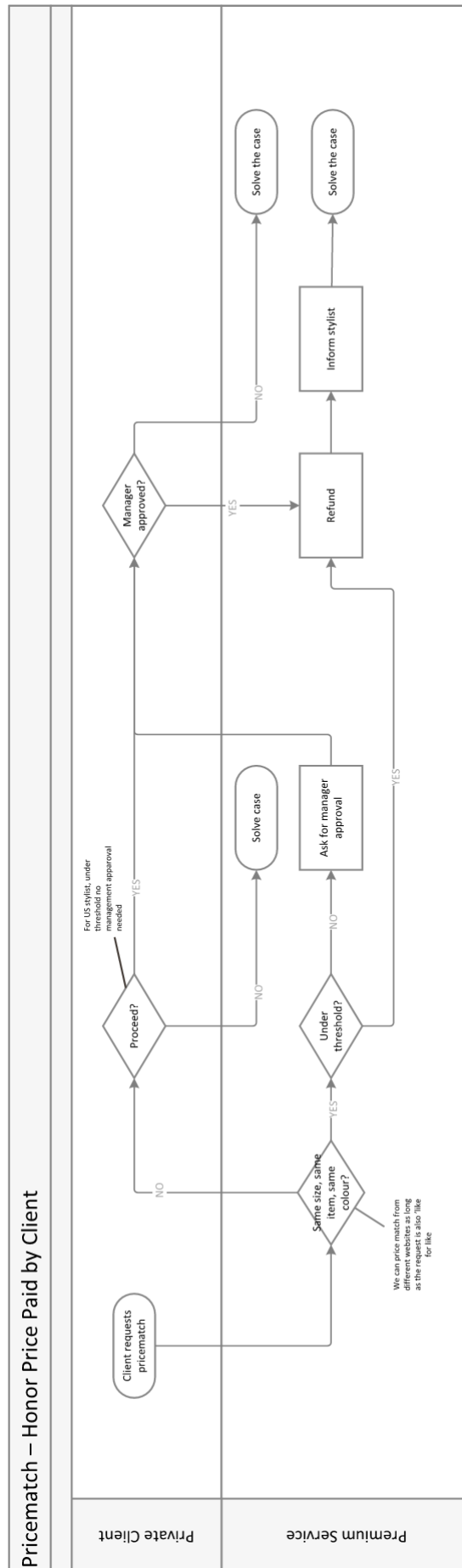


Figure A.24: Pricematch - honor price paid by client process

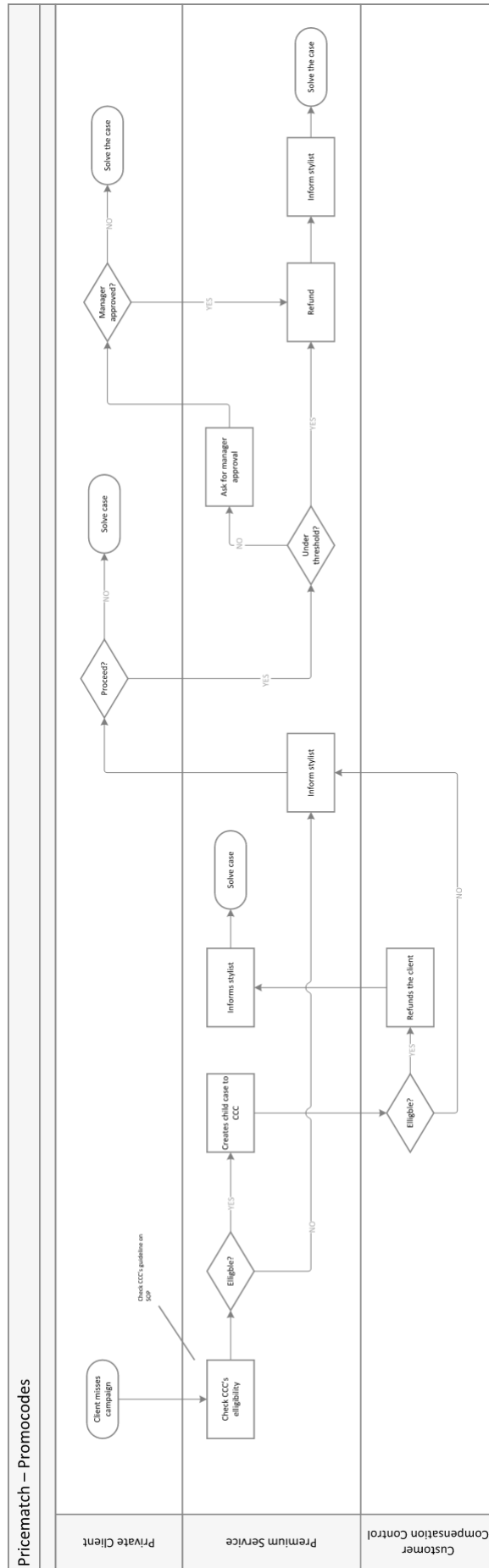


Figure A.25: Pricematch - honor promo code process

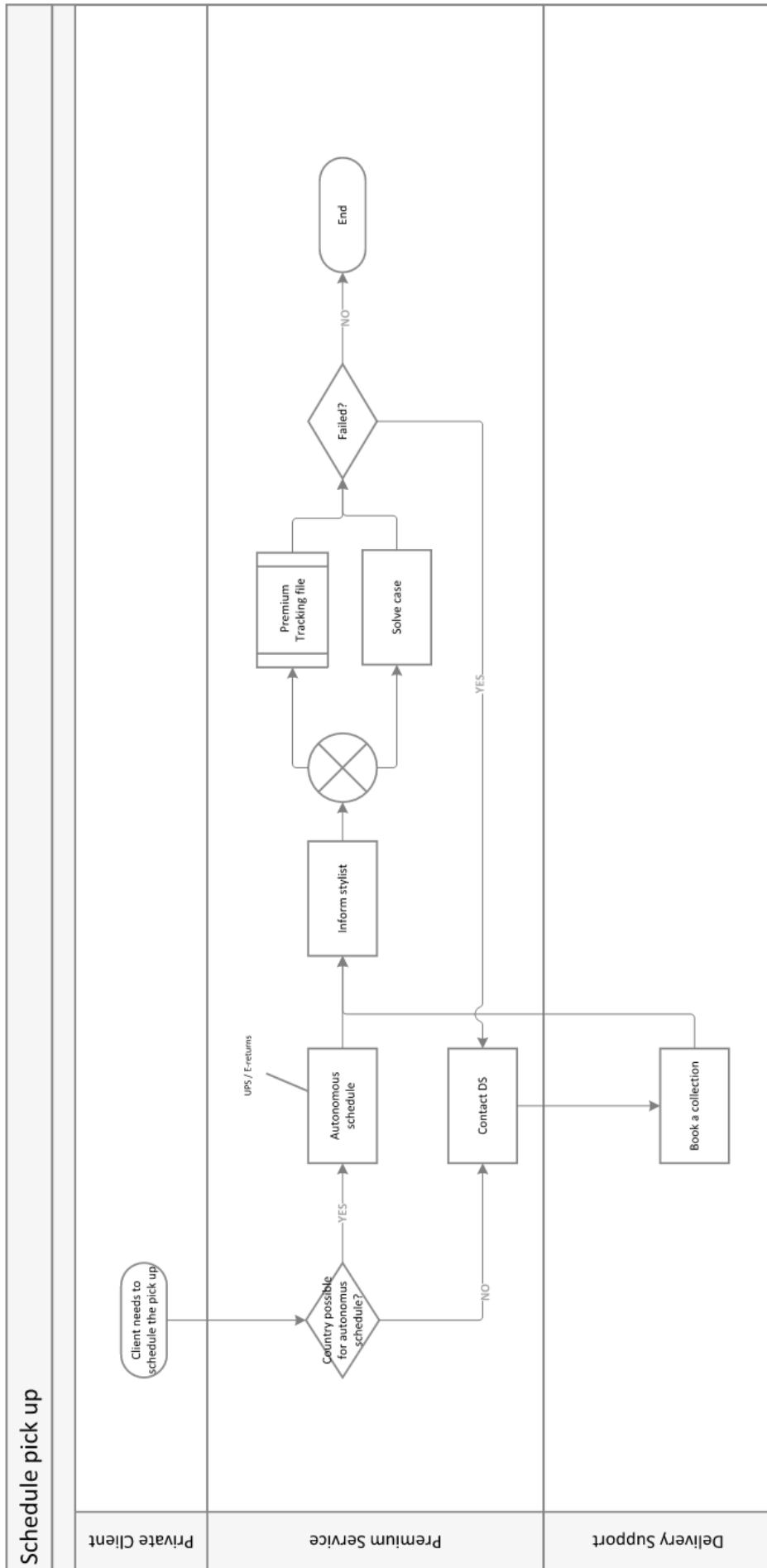


Figure A.26: Schedule Pick-up process

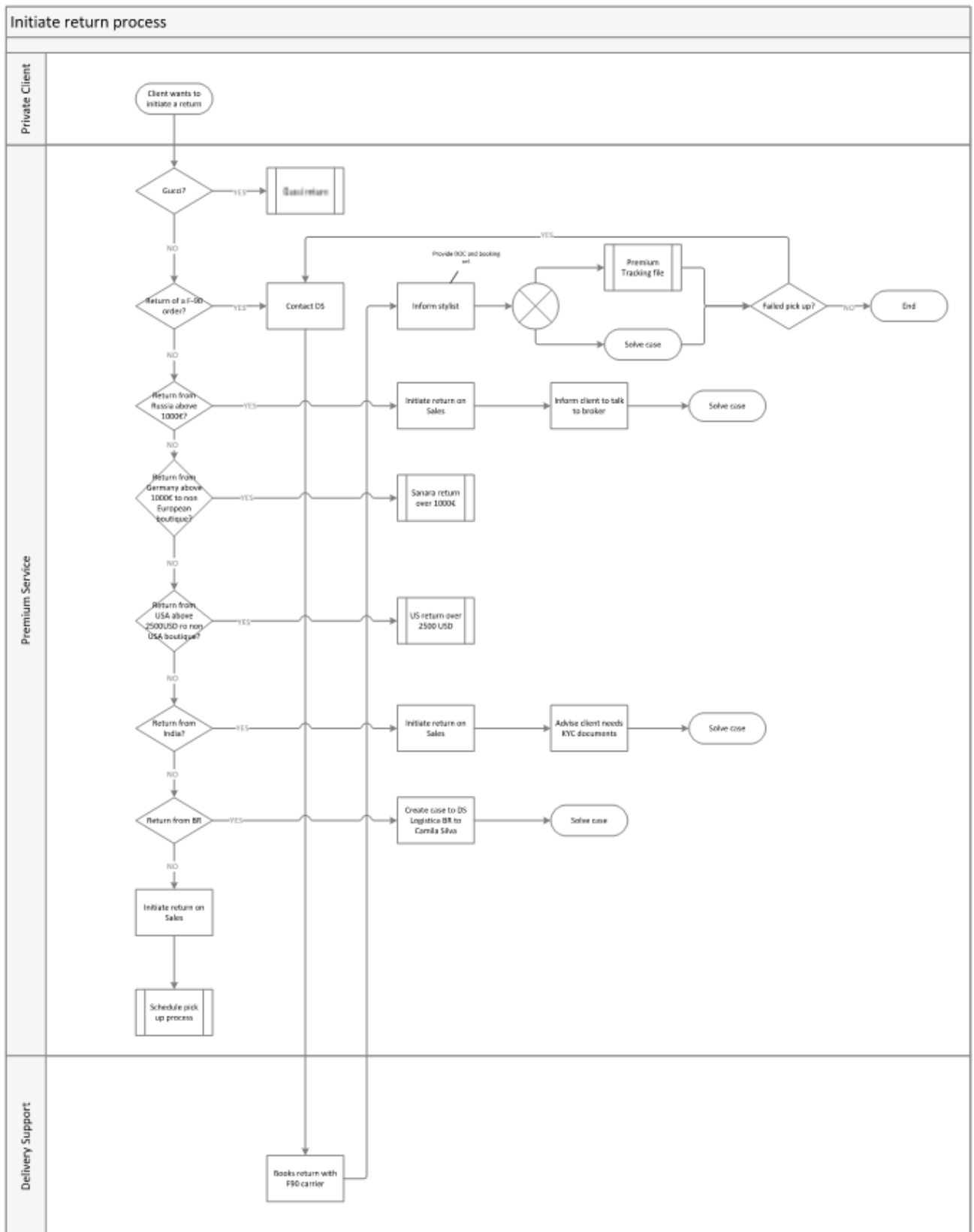


Figure A.27: Initiate Return process

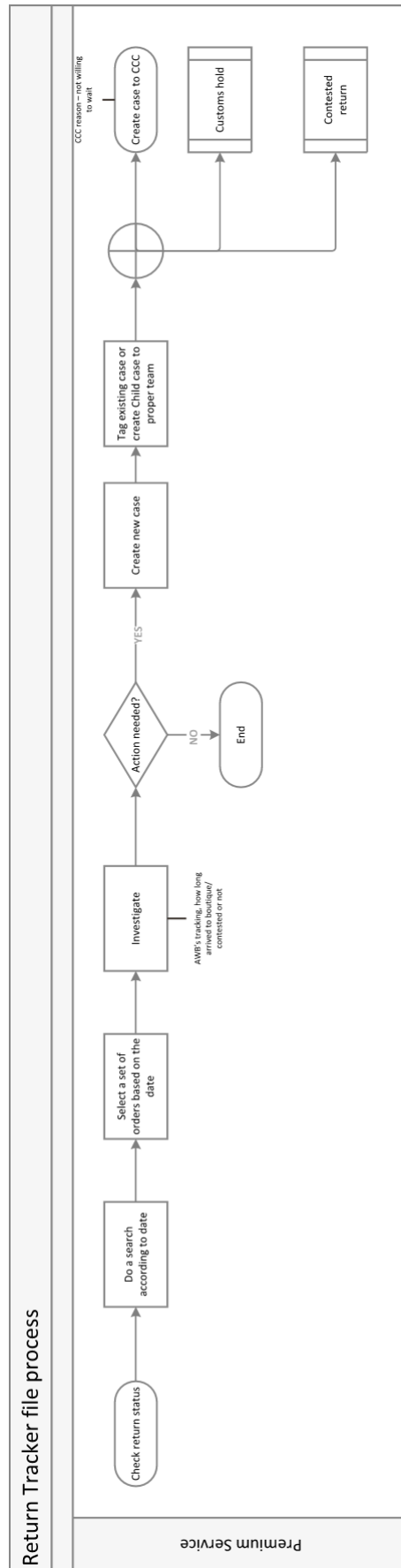


Figure A.29: Return Tracker process

As said in section 4.1.2, the new categories that will come in place in the near future were already analyzed and associated with the existing processes. The list of new categories and the respective processes is shown in Figure A.30.

Main category	SUB CATEGORY	Outcome	Associated Process
Visit	Promotions T&C / Benefits	Add Benefits Add stylist Remove Stylist	PrS-Add Benefits PrS-ChangeStylist
Search	Create offline product		PrS-CreateOfflineProduct
Search	Consignment orders	Accepted Not Accepted	PrS-ConsignmentOrders
Search	Product details / Availability	Successful Not Successful	BAU - investigate solve problem give information
Search	Measurements	Information provided Information not provided	BAU - investigate solve problem give information
Search	Pricing & Promotions issues	Successful Not Successful	PrS-PriceSimulator / BAU
Search	App/Website feedback		BAU - investigate solve problem give information
Checkout	Cant place order	Payment issues (problemas do lado de cliente) Platform issues - informed (problemas no checkout) Other Block removed (Chargeback, score) Block maintained (Chargeback, score)	BAU - investigate solve problem give information Chargeback
Checkout	Bank transfer		PrS-BankTransfer
Checkout	Motopayment	Successful Not Successful	PrS - Motoapayment
Pre-Delivery	Address change	Successful Not possible to change, address confirmed Not possible to change, RTD	PrS-AddressChange/Redirection
Pre-Delivery	Wrong price		PrS - Wrong Price
Pre-Delivery	Cancellation request	Successful Not Successful	PrS-Cancellations/RTD
Pre-Delivery	Order status	Inform about delayed Inform order is processing Create Jira for Ghost order	Order Push BAU - investigate solve problem give information BAU - investigate solve problem give information
Pre-Delivery	Report Fraud	Inform fraud Other	BAU - investigate solve problem give information
Pre-Delivery	Edit payment/ item detail	Refused change Refused change- order cancelled Confirmed details	PrS-Cancellations/RTD Motopayment
Pre-Delivery	Pricematch	Honored Not honored	PrS-Pricematch - honor price paid by client
Pre-Delivery	Honor Campaign	Honored Not honored	PrS-Pricematch (promocode- when CCC or not)
Pre-Delivery	Goodwill refund		PrS-Goodwill
Pre-Delivery	Shipping upgrade	Shipping upgraded Order Not eligible for upgrade No other service available	PrS-SDDrequest
Pre-Delivery	Gift wrap/ Gift card		Send airwaybill
Pre-Delivery	Special requests		SpecialProcess
Delivery	Customs hold	RTD Delivered Abandoned/Confiscated	PrS - Customs Hold
Delivery	Duties & Taxes	Refunded Not Refunded	PrS-Duties/wronglyCharged
Delivery	Tracking Information	Informed order ready to be shipped Informed order is in transit Request documents	BAU - investigate solve problem give information
Delivery	Failed delivery	RTD Delivery re-arranged Reshipment	Failed delivery
Product Received	Damaged item received	Discount approved Return/Full refund Exchange By design explained	PrS-DamagedItem BAU - investigate give information
Product Received	Wrong item received	Discount approved Return/Full refund Exchange	PrS-WrongItem
Product Received	Missing accessories/tags	Discount approved Return/Full Refund Accessory shipped	PrS-MissingAccessories
Product Received	Empty box	Item re-shipped Rejected refund Approved refund	PrS-LostParcel
Product Received	Pricematch	Honored Not honored	PrS-Pricematch - honor price paid by client
Product Received	Honor Campaign	Honored Not honored	PrS-Pricematch (promocode- when CCC or not)
Product Received	Goodwill refund		PrS-Goodwill
Product Received	Lost parcel	Found by us Found by customer Approved refund Rejected refund	PrS-LostParcel
Return	Initiate return	Return scheduled Return scheduled due to system error	PrS-InitiateReturn
Return	Customs hold	RTD Delivered Abandoned/Confiscated	PrS - Customs Hold
Return	Return Status	Refund customer Information provided Lost parcel found in transit Lost parcel - Refund approved Lost parcel - Refund rejected. Other	BAU - investigate solve problem give information
Return	Contested Returns	Refused (sent back to customer) Refunded Item reshipped by customer	PrS-Contested Return
Refund	Refund status	Refund Requested Refund proof provided Refused due to Chargeback	BAU - investigate solve problem give information Chargeback
Refund	Refund amount	Corrected amount Information provided	BAU - investigate solve problem give information

Figure A.30: New categories list

Appendix B

SQL Queries

In this appendix, all the new SQL Queries reviewed for the Proactive work monitoring, can be consulted.

```
select
getdate() AS extraction_date_time, c.BoutiqueOrder,c.AWB,c.OrderDate,c.datestep5,c.step,c.store,c.CustomerEmail,c.Exception,c.PortalOrder
from
(
select
a.*
,cast(cast(Exceptions.ExceptionDate as date) as varchar) + '-' + Exceptions.ExceptionName + '-' + Exceptions.ExceptionDescription as Exception
from
(
select distinct --a
o.MerchantOrderCode as BoutiqueOrder
,awb.[AirwaybillNumber] as AWB
,o.ordercode as PortalOrder
,cast(o.datacriado as date) as OrderDate
,o.email as CustomerEmail
,o.country as CustomerCountry
,s.leveltodo as step
,s.senddate as senddate
,o.userid as UserID
,l.Nome as Store
,l.paisid as Countryid
,labels.created as datestep5
, case when l.Nome in ('FASHION CONCIERGE HR','FASHION CONCIERGE UK','FASHION CONCIERGE US','FC 24SEVRES','FC BALENCIAGA','FC CELINE',
'FC CHANEL','FC CELGE','FC DIOR','FC DOLCEANDGABBANA','FC FENDI','FC GUCCI','FC HARRODS','FC HARVEYNICHOLS','FC LOUISVUITTON','FC MAXMARA',
'FC SELFRIDGES','FC US DROPSHIP','FC US IN-STORE','FC US NEW YORK','FC US PRE ORDER','FC VALENTINO','FCUK Edits','FCUK HONG KONG',
'FCUK Browns','FCUK BROWNS PRE-ORDER','FCUK Edits','FCUK LONDON','FCUK PRE-ORDER',
'FCUK SMS','FCUS Edits','FCUS SPL','FCUS SP2','PENTHOUSE','PLATFORME','TAILORED STYLING','FARMARA LIMITED') then 'Fashion Concierge'
else 'Other stores' end as [IsFashionConcierge?]
,o.orderid
,o.siteid
, case when datepart(dw,o.DataCriado) in ('7','1','2') and datepart(dw,getdate())=6 and (datediff(day,o.DataCriado,getdate()) in ('4','5','6')) then 4
when datepart(dw,getdate()) in ('7','1') then 0
else DATEDIFF(day,o.datacriado, getdate())-2 end as [workdays]
from BI_SYNC.dbo.GLBOrders o (nolock)
inner join BI_SYNC.dbo.ParOrderStock s (nolock) on o.orderid=s.orderid and o.siteid=s.siteid
inner join BI_SYNC.dbo.BOLocais l (nolock) on o.siteid=l.localid
left join [BI_SYNC].[dbo].[ParDHLShipmentLog] awb (nolock) on o.orderid=awb.orderid and o.siteid=awb.siteid and awb.active=1
left JOIN BI_SYNC.Labels Labels on awb.AirwaybillNumber=Labels.waybillID
where s.leveltodo between 1 and 5
and o.tenantid=10000
and o.userid<>0
)a
cross apply --VIP customers
(
select top 1 tiername
from [BI_REPORTING].[dbo].[VIP_Users] VIP (nolock)
where a.userid=VIP.userid and VIP.userid > 0 --VIP.tenantID=10000
) b
outer apply --Exceptions
(select top 1
reasondesc.[Description] as ExceptionName
,event.description as ExceptionDescription
,event.CreatedOn as ExceptionDate
from [BI_SYNC].[dbo].[OMSEvent] event (nolock)
left join [BI_SYNC].[dbo].[OMSReason] reason (nolock) on event.idReason = reason.IDReason
left join [BI_SYNC].[dbo].[OMSReasonDescription] reasondesc (nolock) on reason.IDReasonDescription = reasondesc.idDescription
where a.siteID = event.siteID and a.orderID = event.orderID and event.CreatedOn >= '2018-04-01'
order by event.CreatedOn desc
) exceptions
) c
where [IsFashionConcierge?]='Other stores'
and Countryid<>28
datestep5 is Null
or (
(datestep5 > OrderDate)
and datediff(hour, datestep5, getdate())>24
)
)
and [workdays]>=4
```

Figure B.1: "Order Pipeline" file - query

```

select
  art.ArtigoID as Item_ID
  , o.merchantordercode as Order_Number
  , art.CriadoEm as Create_Date
  , concat ( 'https://www.farfetch.com/ru/shopping/women/fashion-concierge-vip-channel-channel-255-phone-bag-item-' , art.ArtigoID , '.aspx' ) as Link
  , DATEDIFF(day,art.CriadoEm, getdate()) - DATEDIFF(week, art.CriadoEm, getdate()) * 2 AS Workdays
  , s.case_number as Case_Number
from (
  select *
  from bi_sync..boartigos (nolock) as art
  where art.PicRedirectID > 0
  AND art.SecondView = 0
  AND art.MainView > 0
  AND art.criadopor = 0
  AND art.availablepartners = 1
  AND art.ArtigoID > 15000000
  AND art.AvailablePortal = 1
) as art
left join bi_sync..bogoitembase (nolock) as it on it.itemID = art.artigoID
left join bi_sync..glborders (nolock) as l on art.artigoID = l.ArtigoID and l.siteID > 0
left join bi_sync..glborders (nolock) as o on o.siteID = l.siteID AND o.orderID = l.orderID
left join (select S.case_number, s.subcategory, cast( s.product_code as varchar) as product_code
  from BI_REPORTING.[wfoetl].[fact_case] (nolock) as S where s.subcategory = 'Create Offline Product' ) as S on cast(s.product_code as varchar) = cast(art.artigoID as varchar )
where (it.isonline = 1 OR it.isavailable = 1)
group by art.artigoID, art.InternalNumber, art.CriadoEm, o.merchantordercode, it.isonline, it.isavailable, art.availableportal, art.PicRedirectID, S.case_number

```

Figure B.2: "Monitor offline items" file - query

```

Drop table if exists #TMP

Select distinct
  VS.PortalOrder, VS.BoutiqueOrder, VS.OrderDate, VS.OrderDate_Group, VS.ReturnCreatedDate, VS.ReturnCreatedDate_Group
  , case
  when cast(sum (VS.Refund_Amount)as decimal(10,2)) >= cast(sum (VS.UserTotal) as decimal(10,2)) then 'Yes'
  when (cast(sum (VS.Refund_Amount)as decimal(10,2)) < cast(sum (VS.UserTotal) as decimal(10,2)) and cast(sum (VS.Refund_Amount)as decimal(10,2))<0) then 'Partial'
  when cast(sum (VS.Refund_Amount)as decimal(10,2))=0 then 'No'
  else 'No' end as [Refunded]
  , VS.AWB1, VS.SecondLeg, VS.PickupDate, VS.CustomerEmail, VS.Shipping_Country, VS.CustomerTier, VS.ContestReason, VS.ContestComment, VS.ReturnStep , VS.[Has Contest], VS.[Has AWB], VS.Notes,
into #TMP
from (
  select
    o.ordercode as PortalOrder, o.merchantordercode as BoutiqueOrder, o.datacriado as OrderDate
    , format(case when o.datacriado is null then cast(getdate() as date) else o.datacriado end, 'yyyy-MM') as OrderDate_Group
    , r.date as ReturnCreatedDate
    , format(case when r.date is null then cast(getdate() as date) else r.date end, 'yyyy-MM') as ReturnCreatedDate_Group
    , cast (RE.outros + RE.credits as decimal (10,2)) as Refund_Amount
    , GL.UserTotal
    , r.UPStraking as AWB1
    , r.pickupDate as PickupDate

    , o.email as CustomerEmail
    , o.country as Shipping_Country
    , v.tier as CustomerTier
    , awb_2 as SecondLeg
    , c.ContestReason
    , c.ContestComment
    , case when c.contestreason is null then 'No' else 'Yes' end as [Has Contest]
    , case when isnull(r.UPStraking, '') = '' then 'No AWB' else 'Has AWB' end as [Has AWB]
    , case
    when r.Leveltodor = 1 then '1 - Return created'
    when r.Leveltodor = 2 then '2 - Return in store'
    when r.Leveltodor = 3 then '3 - Return in transit or to be validated'
    end as ReturnStep
    , case
    when r.pickupDate is not null AND r.deliveryDate is null and DATEDIFF(DAY, r.pickupDate, GETDATE())>5 then 'In Transit for more than 5 days'
    end as Notes
    , case when datepart(dw,r.date) in ('7','1','2') and datepart(dw,getdate())=6 and (datediff(day,r.date,getdate()) in ('4','5','6')) then 4
    when datepart(dw,getdate()) in ('7','1') then 0
    else DATEDIFF(day,r.date, getdate())-2 end as [workdays]

  from (select R.orderID ,R.siteID ,R.datacriado ,R.leveltodor , r.date ,r.UPStraking ,r.pickupDate ,r.deliveryDate from bi_sync..farrorders (nolock) as r where r.datacriado>'2019-01-01' AND
  inner join (select o.country, o.email, o.datacriado, o.merchantordercode, o.ordercode, o.orderID, o.siteID, o.userID, o.tenantID from bi_sync..glborders (nolock) as o ) as o on r.orderID
  inner join (select userID as userID, tiername as tier from bi_reporting..vip_users (nolock) where userID>0) as v on o.userID = v.userID
  left join (select FL.GLBOrderLineID,FL.OrderID,FL.SiteID from [BI_SYNC].[dbo].FarOrderLines as FL (nolock)) as FL on R.OrderID = FL.OrderID and R.siteID = FL.SiteID
  left join (select GL.UserTotal, GL.OrderID, GL.GLBOrderLineID, GL.SiteID from [BI_SYNC].[dbo].glborders as GL (nolock)) as GL on R.OrderID = GL.OrderID and R.siteID = GL.SiteID and FL
  inner join (select RE.outros, RE.credits, RE.orderID, RE.siteID, RE.who from [BI_SYNC].[dbo].OrdersRefunds as RE (nolock) where RE.who <> 'auto') as RE on r.orderID = RE.orderID AND r.site
  inner join (select AWB.awb_2, AWB.order_id, AWB.site_id from [analysts].[dbo].[ops_del_kpi_returns_rb] as AWB (nolock)) as AWB2 on r.orderid = AWB2.order_id and r.siteID = AWB2.site_id
  left join (select cd.description as ContestReason, ce.description as ContestComment, siteID as siteID, orderID as orderID from bi_sync..OMSEvent (nolock) as ce
  left join bi_sync..OMSReason (nolock) as cr on ce.IDreason = cr.IDreason
  left join bi_sync..[OMSReasonDescription] (nolock) as cd on cr.IDreasondescription = cd.IDdescription
  where
  IDReasonDescription not in (1,2,3,5,6,7,8,9,12,13,14,15,16,17,18,22,24,27,28,30,40,42)
  ) as c on c.orderID = o.orderID AND c.siteID = o.siteID

  where
  o.tenantID = 10000
  ) as VS
) as VS
Group by
  VS.PortalOrder, VS.BoutiqueOrder, VS.OrderDate, VS.OrderDate_Group, VS.ReturnCreatedDate, VS.ReturnCreatedDate_Group, VS.AWB1, VS.PickupDate, VS.CustomerEmail, VS.Shipping_Country, VS.Customer
  , VS.ContestReason, VS.ContestComment, VS.ReturnStep , VS.[Has Contest], VS.[Has AWB] , VS.Notes, VS.UserTotal, VS.Refund_Amount, VS.[Workdays], VS.SecondLeg
insert into BI_reporting.dbo.PremiumReturnTrackerBacklog
select
  #TMP.PortalOrder, #TMP.BoutiqueOrder, #TMP.ReturnCreatedDate, #TMP.[Refunded] , #TMP.AWB1, #TMP.CustomerEmail, #TMP.ContestReason, #TMP.ReturnStep
  , getdate() as extraction_date_time
  , #TMP.SecondLeg
from #TMP
where [Refunded] in ('No','Partial')
and [workdays]>=4

```

Figure B.3: "Return Tracker" file - query

```

Drop Table if exists #TMP

select
c.*
, case when track_event.Date is null then 'No tracking' else 'Has tracking' end as [Has tracking?]
, track_event.Date as Tracking_Date
, track_event.Code as Tracking_Code
, replace(replace(replace(replace(track_event.Description, char(13),''), char(10),''), char(9),''), ' ', ' ') as Tracking_Description
, replace(track_event.Location, ' - US', ' -USA') as Tracking_Location
, case
    when track_event.Description like '% / Drop%' then 'Waiting customer pick up'
    when events_group.StatusGroup = 'In transit' and track_event.Location like '%'+[CountryCode_DHL] then 'In transit - Destination'
    when track_event.Description like '% I / Out %' then 'Ready for delivery'
    when isnull(track_event.Date, '') = '' then 'Tracking issues'
    when events_group.StatusGroup = 'Delivered' and [C&C?] = 'Yes' then 'Waiting customer pick up'
    else events_group.StatusGroup end
as Tracking_Status --exceptions of tracking status, mainly UPS
, case when replace(track_event.Location, ' - US', ' -USA') like '%'+[CountryCode_DHL]
then 'At destination'
else 'Not at destination'
end as [At destination?]
Into #TMP
from (
Select
a.BoutiqueOrder
, a.OrderDate_GMT
, a.OrderDate_Group
, a.SendDate
, a.SendDate_Group
, a.PortalOrder
, a.Shipping
, a.Partner
, a.PartnerCountry
, a.CustomerCountry
, a.CustomerCity
, a.CustomerState
, a.CustomerName
, a.CustomerEmail
, a.Customer_UserID
, isnull(a.AWB, AWB_manual.AWB) as AWB
, a.Carrier
, a.[C&C?]
, a.[CountryCode_DHL]
, a.LabelTrackingEventId
, a.Workdays
from
--w cross apply VIP
select
l.sigla + cast(o.orderid as varchar) as BoutiqueOrder
, cast(o.datacriado as date) as OrderDate_GMT
, format(o.datacriado, 'yyyy-MM') as OrderDate_Group
, cast(l_s5.date as date) as SendDate
, format(case when l_s5.date is null then cast(o.datacriado as date) else l_s5.date end, 'yyyy-MM') as SendDate_Group
, o.ordercode as PortalOrder
, case ship.ServiceType
    when 'D' then 'Same Day'
    when 'S' then '90'
    else ship.ServiceType end as Shipping
, l.nome as Partner
, p.nome as PartnerCountry
, o.scountry as CustomerCountry
, o.scity as CustomerCity
, o.sstate as CustomerState
, o.NickName as CustomerName
, o.email as CustomerEmail
, o.userid as Customer_UserID
, replace(awb.[AirwaybillNumber], '_', '') as AWB
, case
    when ship.Descricao like 'DHLA' then 'DHL'
    when ship.Descricao like 'UPS' then 'UPS'
    when ship.Descricao like 'Fedex' then 'Fedex'
    when ship.Descricao like 'Sedex' then 'Correios BR'
    else ship.Descricao end
as Carrier
, case when s.leveltodo = 7 then 'Yes' else 'No' end as [C&C?]
, [CountryCode_DHL]
, (select max(LabelTrackingEventId) from [BI_SYNC].[dbo].[LabelTrackingEvents] (nolock)
where [LabelTrackingId]=track.[LabelTrackingId] as LabelTrackingEventId --Escolher o tracking mais recente
, case when sum(case when cats.Home like '%glass%' then 1 else 0 end) > 0 then 'Yes' else 'No' end as [HasEyewear?]
, o.siteID
, o.orderid
, case when datepart(dw, l_s5.date) in ('7', '1', '2') and datepart(dw, getdate()) = 6 and (datediff(day, l_s5.date, getdate()) in ('4', '5', '6')) then 4
else DATETIMEFF(day, l_s5.date, getdate()) - 2 end as [workdays]
from BI_SYNC.dbo.GLBOrders o (nolock)
inner join BI_SYNC.dbo.BOLocalis l (nolock) on o.siteid=l.localid
inner join BI_SYNC.dbo.BOFaises p (nolock) on l.paisid=p.paisid
inner join BI_SYNC.dbo.FarServicesUPS ship (nolock) on o.shiptype = ship.idservice
inner join BI_SYNC.dbo.FarOrderStocks s (nolock) on o.orderid=s.orderid and o.siteid=s.siteid
inner join [ANALYSTS].[FPLIVE\BI Analysts].[Ops_Del_CountryCodeDHL] ccode (nolock) on ccode.countryid=o.scountryid
left join BI_SYNC.dbo.FarOrderLog l_s5 (nolock) on o.orderid=l_s5.orderid and o.siteid=l_s5.siteid and l_s5.logtype=85 and l_s5.date >= o.datacriado
left join [BI_SYNC].[dbo].[FarDHLShipmentLog] awb (nolock) on o.orderid=awb.orderid and o.siteid=awb.siteid and awb.active=1
left join [BI_SYNC].[dbo].[LabelTrackings] track (nolock) on track.[TrackingCode]=replace(awb.[AirwaybillNumber], '_', '') and datediff(hour, o.datacriado, track.Created) > -24
left join [BI_SYNC].[dbo].[GLBOrderLines ol (nolock) on ol.siteID = o.siteID and ol.orderID = o.orderID
left join [BI_SYNC].[dbo].[BOLItemsTCM items (nolock) on ol.ArtigoID = items.ItemID and items.smaincat=1
left join [BI_SYNC].[dbo].[BOTreeCats_TCM cats (nolock) on items.CatID = cats.CatID
where o.datacriado >= '2018-03-11'
and s.levelToDo in (6,7)
and o.siteid > 5000
and o.tenantid=10000
group by l.sigla, o.orderid, o.datacriado, l_s5.date, o.ordercode, ship.ServiceType, l.nome, p.nome, o.scountry, o.scity, o.sstate, o.NickName, o.sphone, o.sNickName, o.email
, o.userid, awb.[AirwaybillNumber], ship.Descricao, [CountryCode_DHL], s.leveltodo, [LabelTrackingId], o.siteID
) a
select top 1 tiername
from [BI_REPORTING].[dbo].[VIP_Users] VIP (nolock)
where a.Customer_UserID = VIP.userid and VIP.userid > 0 --VIP.tenantID=10000
) b
outer apply
(select top 1 addinfo.TraUPS as AWB
from BI_SYNC.dbo.GLBOrders o
inner join [BI_SYNC].[dbo].[GLBOrderLines ol (nolock) on ol.siteID = o.siteID and ol.orderID = o.orderID
left join [BI_SYNC].[dbo].[GLBOrdersAdditionalInfo] addinfo (nolock) on ol.[GLBOrderLineID] = addinfo.[GLBOrderLineID]
where o.siteID = a.siteID and o.orderID = a.orderID and o.datacriado >= '2018-03-11'
order by addinfo.TraUPS desc
) AWB_manual
) c
left join [BI_SYNC].[dbo].[LabelTrackingEvents] track_event (nolock) on c.LabelTrackingEventId=track_event.LabelTrackingEventId
left join [Analysts].[FPLIVE\BI Analysts].[Ops_Del_TrackingStatusGroup] events_group (nolock) on events_group.TrackingCode = track_event.Code

insert into BI_reporting.dbo.PremiumOrderTrackerBacklog
Select
getdate() as extraction_date_time
, #TMP.BoutiqueOrder
, #TMP.PortalOrder
, #TMP.CustomerEmail
, #TMP.Customer_UserID
, #TMP.AWB
, #TMP.Tracking_Description
from #TMP
where [workdays]>=4
and Tracking_Status not in ('Ship info received', 'In transit', 'Delivered', 'Waiting customer pick up', 'Ready for delivery',
'Forwarded for delivery', 'In transit - Destination', 'Clearance Complete')

```

Figure B.4: "Order Tracker" file - query