Design and Implementation of a tailored Project Management Framework

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“To improve is to change; to be perfect is to change often.”

Winston Churchill

Abstract

Farfetch is facing growth pains as a result of the quick expansion. The organization culture and its innovative genesis results in a vast number of ideas. This structure leads to problems regarding which idea should be followed, while taking into account the business needs and internal teams restrictions. Furthermore, projects are being managed without a methodic approach combined with a lack of documentation and visibility over the projects' course.

This dissertation focuses on creating a new tailored project management framework that combines traditional project management with software development by implementing a four step approach: pre-project; initiation; execution; and close-out and maintenance. In particular, for the first stage, a prioritization exercise with tools to help the project portfolio decision process was developed. Moreover, an internal structure was stablished to oversee project activities and assure strategic alignment and long term vision.

Each step has key activities and deliverables, that are flexible and adjustable to requirements change throughout execution. To support this framework, tools and techniques are developed or adapted to fit the organization needs. On the other hand, conceptual procedures were created to smooth internal processes of the new framework.

In order to empirically validate and improve the framework, a proof of concept was conducted in a real project within the organization. Since the ideation to the planning phase, the project team used the framework to guide the project course, which enhanced the project decision process, communication and visibility over risks and impacts alongside the project.

Desenho e Implementação de uma estrutura de Gestão de Projetos adaptada

Resumo

A Farfetch depara-se de momento com as dores de crescimento resultantes de uma rápida expansão. A sua cultura organizacional e génese inovativa resultam num vasto número de projetos e ideias. Esta estrutura leva a problemas relacionados com que ideias devem ser seguidas pela organização, tendo em atenção as necessidades do negócio e as restrições internas. Para além disso, os projetos estão a ser geridos sem uma abordagem metódica e com ausência de documentação e visibilidade sobre o curso dos projetos.

Esta dissertação tem o seu foco na criação de uma nova e adaptada estrutura para gestão de projetos, que combine a gestão de projetos tradicional com o desenvolvimento de *software*, através da implementação de uma abordagem em quatro passos: pré-projeto; iniciação; execução; fecho e manutenção. Em particular, na primeira fase, um exercício de priorização foi desenvolvido com vista a ajudar o processo de decisão na gestão de *portfolio* de projetos. Adicionalmente, uma nova estrutura interna foi estabelecida com vista a governar as atividades relacionadas com gestão de projeto e assegurar o alinhamento estratégico bem como a visão a longo prazo.

Cada fase da nova estrutura contempla atividades e entregáveis que são flexíveis e ajustáveis à alteração de requisitos durante a execução do projeto. Para isso, um conjunto de ferramentas e técnicas foram desenvolvidas ou adaptadas à organização para suportar esta nova estrutura. Por outro lado, foram criados procedimentos conceptuais para facilitar os processos internos da nova estrutura.

De modo a validar empiricamente e melhorar a nova estrutura de gestão de projetos, foi conduzida uma prova de conceito utilizando um projeto real da organização. Desde a fase de criação até à de planeamento, a equipa de projeto usou a nova estrutura para guiar o desenvolvimento do projeto que, como consequência, melhorou o processo de decisão, a comunicação e a visibilidade sobre os riscos e impactos ao longo do projeto.

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The past five years were an amazing period of my life where I grew and learned with amazing people. Without them this journey could not have been completed. Therefore, the present dissertation is for them.

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1 Introduction

Farfetch was one of the precursors of luxury e-tail and in the past few years served as a leverage for the paradigm change of shopping, specifically in the fashion industry.

For an organization to survive and thrive in such a competitive market it has to continuously reinvent itself, creating new and exciting products while delivering fast time to market (Aubry, Hobbs, and Thuillier 2007). Therefore, this project main goal is to provide a common framework for cross functional project management, ensuring time, budget and quality control while creating value for stakeholders (Baccarini 1999).

1.1 Farfetch

Farfetch is a luxury e-commerce platform for fashion boutiques, founded in 2008, and the first Portuguese tech unicorn, currently valued at 1.5 billion US Dollars. Since the launch, Farfetch never seized its expansion and is growing steadily with more than half a billion dollars in sales in 2015.

The unique business model of Farfetch allows every boutique that retails fashion luxury items to sell their products in a web platform, available to customers in every part of the globe. Therefore, boutiques can reach a broader audience and increase their revenue without having to invest or add costs to the business. Over the years, Farfetch consolidated its position and validated the business model, which attracted boutiques to join in a snowball effect and, at the moment, there are more than 400 boutiques working with Farfetch.

Farfetch is responsible for maintaining the platform, shipping the product to the customer through outsourcing of a third party carrier services, offer customer service and manage all the other operations. On the other hand, since the displayed products in the website are stored in the boutiques and are not owned by Farfetch, boutiques are responsible for packaging the product before the carrier picks up the order.

The integration of both worlds has many vicissitudes. Hence, Farfetch and boutiques collaborate very closely in order to deliver the desired product on time and with quality, providing a luxury experience. Boutiques can be seen as partners since Farfetch's revenue is generated through a commission based model as a result of the sales generated in the platform.

Being a global company, Farfetch is currently present in ten different locations: Portugal – Porto and Guimarães; United Kingdom – London; United States of America – New York and Los Angeles; Brazil – São Paulo; Russia – Moscow; China – Hong Kong and Shanghai; Japan – Tokyo, counting with more than a thousand employees.

The office located in Porto is currently the biggest one, with more than five hundred people, and is divided into the following departments: Human Resources, Merchandising, Finance, Partner Service, Account Management, Customer Service, Operations and Technology.

Operations by itself combines five different teams: Supply, Delivery, Fraud, Payments and Continuous Improvement. This department oversees and provides support for all the operations and has a close relationship with Customer Service, Account Management, and Partner Service, since they are the connection to Farfetch's customers.

The fast pace of Farfetch and its incipient processes created inevitable challenges and opportunities of improvement. Therefore, the Continuous Improvement comes as an answer to these needs and looks to enhance the Operations teams' procedures and increase efficiency. The present project is part of a Continuous Improvement team initiative.

1.2 Project

Farfetch is divided in multiple areas highly dependent on each other. Therefore, it is very common for people with different expertise and from different departments to work together in cross functional projects. Dimension, complexity and project needs require the creation of a project team that gathers people from various areas in order to achieve the best possible output.

Projects are considered cross functional when the project scope is within two or more functional areas and require people from those areas to develop and implement the project. Being a luxury e-commerce company that has both operational and technological sides, projects usually fall on this category since new services, products or improvements require the technical implementation or involvement from other areas such as Marketing or Finance.

In the past, managing projects at Farfetch was a simpler process. However, with the organization current dimension, it became harder to manage projects. With a rapid growth in the past years, multiple offices around the world and continuous innovation, project managers are faced with major problems in prioritizing and controlling a large number of projects.

The innovative genesis of Farfetch and the startup mindset still present in the company and its employees result in a vast number of ideas that cannot be executed at the same time due to workforce restrictions. Deciding which project to implement or stop has a significant impact on the organization success. Nevertheless, this exercise is being done without a consistent and methodic approach.

During the project life cycle, the teams involved experience difficulties in communicating across functional areas and natural teams, which creates problems in project management and execution. Furthermore, projects are being handled with different techniques, tools and documentation procedures depending on the project manager. This approach creates confusion in the project team and stakeholders.

1.3 Objectives

The main purpose of this project is to create a common framework for managing cross functional projects at Farfetch. The first objective is to create a consistent method for prioritizing projects, helping business sponsors and project managers in the decision making process by taking into account multiple factors such as strategic alignment, effort needed and profitability.

The second objective is to create a four step approach for managing projects since the project idea until project launch. For each step, define deliverables and actions to perform in order to successfully run the project. This project management framework aims to create visibility across project stakeholders throughout the project and ensure a complete and consistent viability study, risk assessment, schedule tracking, and budget control.

1.4 Methodology

In order to create a valid framework that answers the organization needs, project managers and product owners from different functional areas and a business analyst were gathered. A project manager from the Continuous Improvement team was assigned for managing the creation of a new framework.

During a two month period, the team worked together in order to develop the new method and create tools to support it. In the first month, an intensive study of project management needs across the organization was conducted with all the project stakeholders.

Information gathered from this study helped the next phase where multiple hypotheses and scenarios were created for developing a tailored project management framework suited to Farfetch that combines both software and traditional project management, and adding project prioritization practices. This exercise was also led by an extensive literature review.

Alongside with the development of the new step approach, multiple tools and techniques were also created or adapted to suit Farfetch model and support future project management. Finally, a proof of concept exercise was conducted by using the new model in a real project so new needs and improvement opportunities could be detected and implemented.

The project schedule is illustrated in the Figure 1.

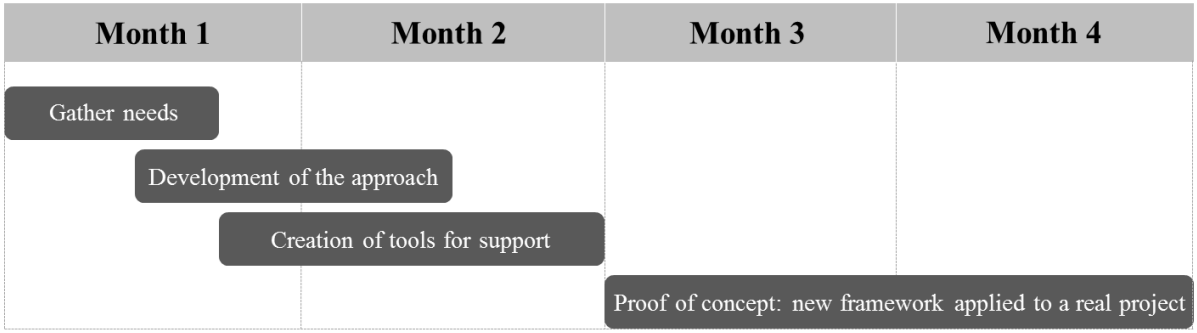

Figure 1 - Project schedule of the design and implementation of the project management framework

1.5 Dissertation Structure

This dissertation is structured as follows.

Chapter 2 includes a synopsis about the combination of luxury and e-commerce, a review over project management concepts and practices, and a brief description of risk and risk management.

Chapter 3 is the development of the new project management framework. Firstly, an in-depth discussion about the previous project management practices is conducted. Subsequently, the new model is presented including new roles, teams, approach and tools created.

Chapter 4 is the adaptation and usage of the framework in a real scenario. This chapter follows a time sequence and the work conducted by the team is based on the project management practices created.

Finally, Chapter 5 concludes the dissertation with a discussion based on the proof of concept results and a description of possible future work.

2 Literature Review

This chapter has its focus on the concepts of Project Management, Risk Management, Scrum software development using Agile, and a brief overview over Luxury E-commerce.

2.1 Combining Luxury and E-commerce

According to Okonkwo (2009), luxury is an identity, a philosophy and a culture. The compatibility of electronic commerce and luxury goods is a sensitive topic and the integration of these two remains largely unexplored, e.g. Versace and Prada did not own a web platform until 2005 and 2007, respectively.

With the industrial revolution, the market of luxury goods was born in Europe, with eccentric products that illustrated contemporaneous lifestyle (Brun et al. 2008). Since then, this market evolved and luxury goods market comprehends approximately 14 sectors, including *haute couture*, *prêt à porter*, shoes and leather goods (Dubois and Duquesne 1993).

Previously, the concept of luxury was about the attributes, qualities and features of the product and sought for the status and prestige. Nowadays, the new notion of luxury focus on the experience embodied in the goods and services acquired, fulfilling customers' luxury fantasies (Brun et al. 2008).

Although e-commerce facilitates the transactions and selling of products or services using the internet as channel where both physical and digital goods are available (Jelassi and Enders 2008) and brands and items information is accessible without time and space constraints (Larraufie and Kourdoughli 2014), combining luxury with electronic commerce can create a paradox (Okonkwo 2009) - Figure 2 materializes this paradox.

Kapferer and Bastien (2012) state that *"A luxury product can communicate via the Internet, but should not be sold there"*. The availability of an exclusive and desired luxury product to a mass and classless internet world transforms the product into a no longer luxury item, although the internet is an effective and indispensable channel for communicating the brand and product (Okonkwo 2009).

On the other hand, Okonkwo (2009) states that the internet is a victim of a misconception since the public associates it with a channel for retailing cheap products or counterfeits. Moreover, the online marketing exposes the brands' image and equity.

Nonetheless, this perception is changing and, forced by the decline of in-store sales from 2006 to 2010, brands significantly increased the adoption of the Web 2.0 as a channel for communicating and establishing e-commerce (Bjørn-Andersen and Hansen 2011). This trend is leveraged by the emergence of social media.

	Codes of Luxury	VS.	Digital Characteristics
Communication	• Elitist and prestigious image • Values: Tradition – Family history – Timeless • Exclusivity • Rarity		• Mass media image • Values: Modernity – Innovation – Instantaneity • Large diffusion • Unlimited
Distribution	• In-store experience through the five senses • Service personalization • Physical dedicated retail space and sometimes exclusive • Product display is key, price is secondary		• Visual experience mainly • Common service to all users • A retail space without any special boundaries • Price and product display do matter similarly

Figure 2 - Opposed characteristics between luxury & digital. Source: Larraufie and Kourdoughli (2014)

However, the entrance in the e-commerce world demands for a new and different brand strategy (Larraufie and Kourdoughli 2014) since the experience of buying luxury goods is intrinsically related with the product physical contact and sensorial experience (Okonkwo 2009).

Therefore, brands need to interact with customers while maintaining brand integrity and exclusivity (Bjørn-Andersen and Hansen 2011) recreating the in-store purchase experience through new services (Larraufie and Kourdoughli 2014) and a immersive website content.

Lee et al. (2012) state that consumers face greater uncertainties when buying online compared to the brick-and-mortar stores experience. In order to mitigate these fears, such as risk of fraudulent websites and privacy invasion, companies must create a solid relationship with consumers. Notice that, for example, 75% of American internet users are not comfortable when providing credit card information (Chen 2006). Additionally, the absence of previous evaluation of the product can be a problem to customers regarding the authenticity of the product or service (Chen and Dhillon 2003).

According to Chen and Dhillon (2003) the overall customer trust is originated from four distinct sources:

- Consumer characteristics: the background of the customer is determinant for the trust. The pre disposition for online selling, allied with the past online experience, age, gender and education highly influence the predisposal for online shopping.
- Firm characteristics: a sense of familiarity (Gefen 2000) and a well stablished off-line presence of a big firm are factors that influence customer trust when buying online.
- Website infrastructure: the way the business presents itself to the customer can affect trust. Characteristics such as functionality, usability, privacy and security are recognized as important factors amongst the users.
- Interactions: the communication and experience provided result in an evaluation of the customer expectations. The trust building is a dynamic process and demands for a consistent positive experience, with integrity and benevolence of the seller.

Creating a memorable experience and building the brand online presence and trust demands for a strategic integration of techniques and tools that look to understand the concept of luxury and combine it with the internet advantages and evolution potential (Okonkwo 2009).

2.2 Project Management

"A project is a temporary organization of a project-oriented company for the performance of a relatively unique short- to medium-term strategically important business process of medium or large scope" (Cleland and Gareis 2010).

Projects are different from never-ending functions since they are temporary and have clear objectives and goals (Ruskin and Estes 1994). A project is completed when goals and objectives are met, or in some cases, when they cannot be accomplished (Heldman et al. 2005).

To execute projects, a set of business process characteristics are used, such as strategic importance, duration, organizations involved, resources required, and costs occurring (Cleland and Gareis 2010). Due to the temporary aspect and uniqueness of a project, the characteristics are elaborated progressively in small steps (Project Management Institute 2013).

Therefore, project management is the aggregation of multiple tools and techniques to describe, organize and monitor the course of project activities (Heldman et al. 2005). Kerzner (2013) adds that project management is designed to improve the usage of business resources by working vertically and horizontally within the company.

Integrating project management in companies with less bureaucracy while executing complex tasks has been largely discussed by corporate executive and academics (Kerzner 2013).

Although the acceptance of project management has not be easy due to the inflexibility of executives and a strong business organizational structure (Kerzner 2013), many companies created a centralized organizational unit that oversees project management practices and, in some cases, projects (Heldman et al. 2005). This unit is designated project management office.

The traditional project management tasks are defined as the planning, controlling, and organizing of projects and the major objects of consideration could be illustrated with the "magic triangle" of project management (Cleland and Gareis 2010), c.f. Figure 3.

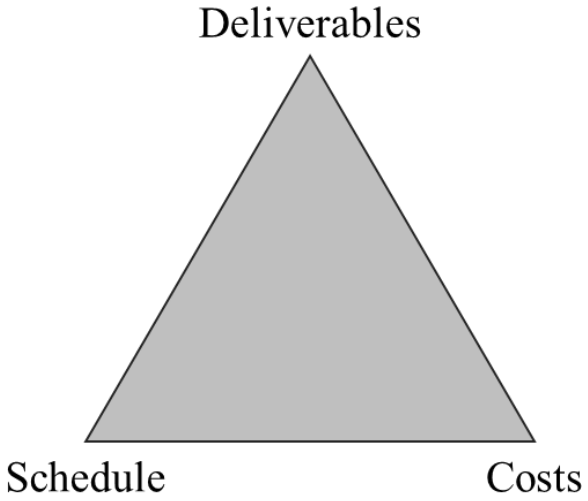

Figure 3 - Traditional objects of consideration of project management ("magic triangle")
Source: Cleland and Gareis (2010)

Cleland and Gareis (2010) stated that this triangle is insufficient and the objects of consideration must be the project objectives, scope, schedule, resource, costs and income, risks while combining the culture, organization and context of the project.

In order to execute the project, a set of stakeholders are included in the project since they are directly involved in the project or can be positively/negatively impacted by the project outcomes (Project Management Institute 2013). Kerzner (2013) states that project management success is directly dependent of the project team and leaders in charge of managing functions.

Additionally, Heldman et al. (2005) considers important to identify all the project stakeholders in an early stage of the project, since stakeholders can provide important information and avoid errors and issues. Listed below are the kind of stakeholders usually involved in projects (Heldman et al. 2005):

- Project manager,
- Project sponsor,
- Customer,
- Board of directors,
- Executive managers,
- Department managers,
- Vendors,
- Suppliers,
- Project management office.

Lock (2007) describes project managers as specialists in the age of technology. Despite of the technical background, project managers should be trained with project management tools and techniques to effectively execute, since project managers are "*responsible for coordinating and integrating activities across multiple functional lines"* (Kerzner 2013).

Kerzner (2013) adds that the job performed by project managers is not an easy one due to the duality between responsibility and authority since this role has to constantly cross two organizational structures that are completely different – project and business. Furthermore, he considers that project managers get to know deeply the operations of a company and this role can serve as preparation for future top management positions.

However, the project manager role is different from the functional manager one since a project manager is responsible for leading the project team into the project objectives, where the functional manager focus strictly on a business area (Project Management Institute 2013).

Depending on the functional structure, the project manager can report to a functional manager or to a program/portfolio manager. In the case of a single project in an organization, the project manager can be inserted into a functional matrix where he acts as a coordinator over the work force but has no authority, which can lead into some problems (Lock 2007).

When a company is taking multiple projects simultaneously, a matrix structure - Figure 4 - can be used and the project team members, while still reporting to their own functional managers, have to report to the project manager of the project they are part of (Lock 2007). Although this structure empowers the project manager, it can also create some authority problems between project and functional areas.

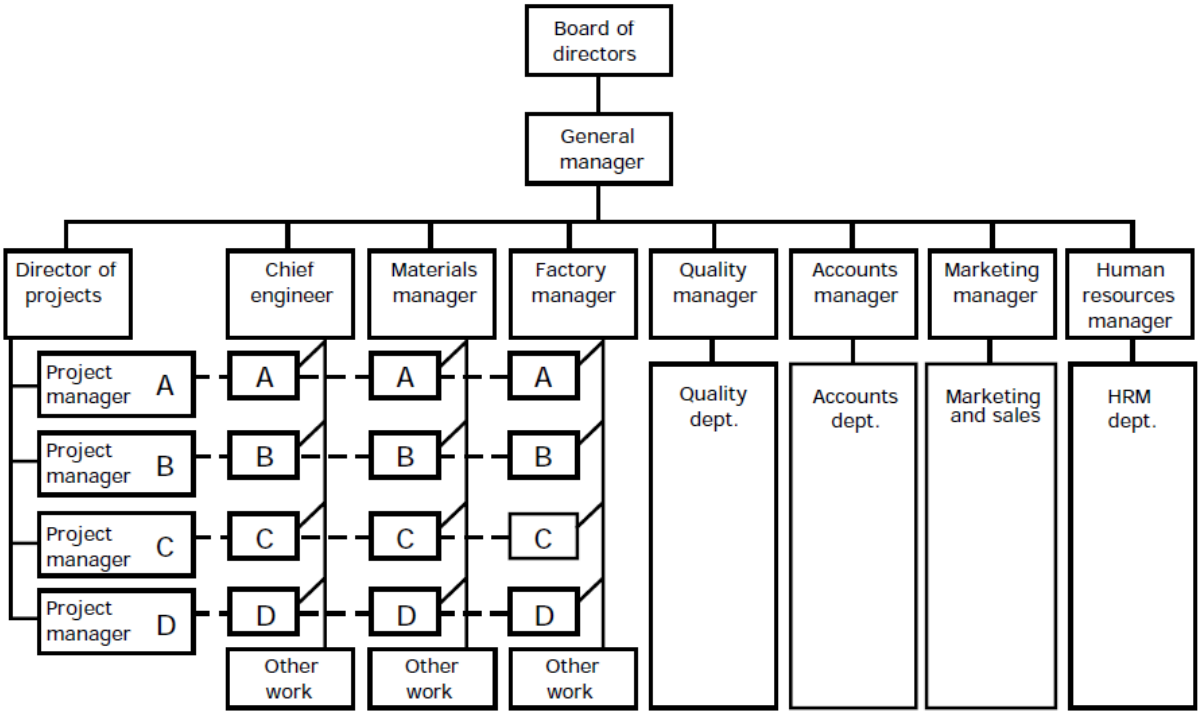

Figure 4 - Matrix organization for several simultaneous manufacturing projects. Source: Lock (2007)

The Project Management Institute (2013) categorizes the project management process into five groups that ensure the effective flow during its life cycle. These groups are represented on Figure 5. The project manager, the business sponsor and the project team use these groups to review project throughout the time (Heldman et al. 2005). The process groups have clear and defined tools and techniques that must be used, based on the various inputs given. However, for each initiative, the project team should carefully address the process inputs and outputs and adapt to it.

According to the Project Management Institute (2013), the Initiating Process group is a set of processes that initiate a new project or stage and where an authorization is given. Furthermore, align stakeholders' expectations while providing a global vision of the project objectives.

In order to delineate the strategy for successfully complete the project, the Planning Process group aggregates all the processes that help to define goals, creating documentation for supporting project execution. This processes are crucial since they define the project course (Project Management Institute 2013).

Using the developed and planned processes by the Planning Process group, the Executing Processes assure that the work is executed and completed. This processes are, usually, the ones with greatest financial impact and where last minute changes can occur (Project Management Institute 2013). Therefore, this is where project managers have to deal with greater conflicts and problems (Heldman et al. 2005).

The Monitoring and Controlling Process is a set of on-going processes throughout the project that controls changes and monitors activities as well as performance results. This type of processes may lead to change in the project plan due to recommendations that are based on the results of the controlling processes (Project Management Institute 2013). Ultimately, these processes aim to control and communicate project status (Kwak and Ibbs 2002).

Finally, the last set of processes – Closing Processes – are orientated to finish all the other processes in order to formally complete the project. However, some projects could be terminated prematurely due to project team decision or extraordinary situations (Project Management Institute 2013). All the information regarding the project should be documented so it can be used in future projects (Heldman et al. 2005).

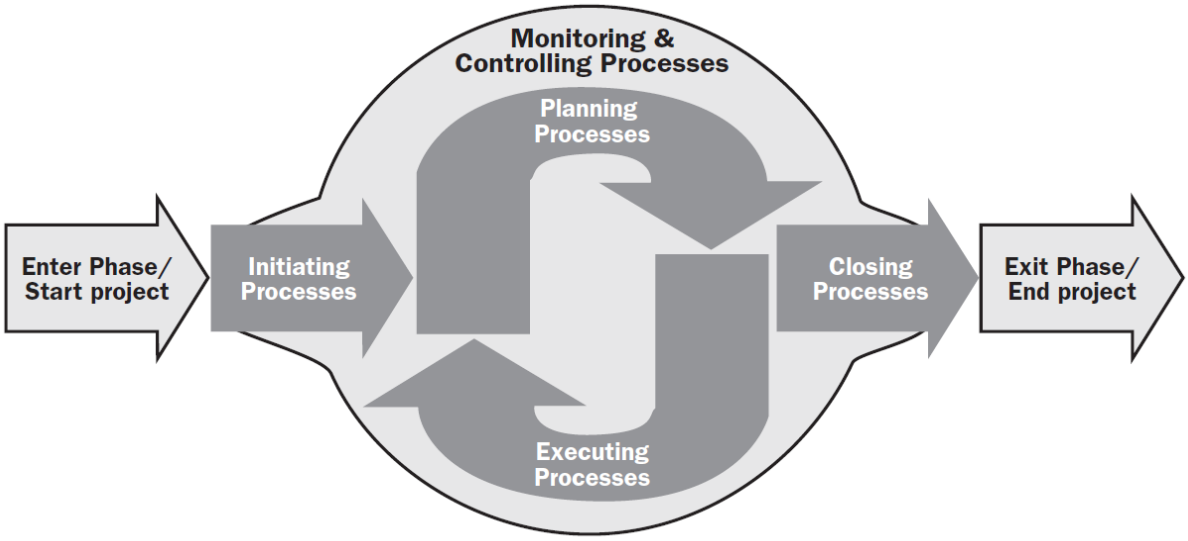

Figure 5 - Project management process groups. Source: Project Management Institute (2013)

Despite all this structure, the detail of the adopted processes is tailored to each project, customer and business needs, which can lead to multiple variations within the same company (Kendrick 2012).

2.3 Project Risk Management

Risks are defined by Kerzner (2013) as possible events that in case of occurrence may affect project timeline, costs and performance. Nonetheless, risks are not only harmful and if properly managed by specialized people, risks can also represent an opportunity for the business and project (Oslon and Wu 2008).

During the project, risks may occur in every stage and can have an internal or external origin and the latest they occur in the project, the bigger is the financial and time impact (Lock 2007). Risks are, therefore, uncertainty. The management of this uncertainty, which includes knowing the risks and understanding the impact, prepares the project team to handle the risk when and if they occur (Heldman et al. 2005).

Heldman et al. (2005) divide project risks in four categories:

- Technical, quality, or performance risks – these risks include "*risks associated with unproven technology, complex technology, or changes to technology anticipated during the course of the project. Performance risks may include unrealistic performance goals"*
- Project management risks – this includes risks related to *"improper schedule and resource planning, poor project planning, and improper or poor project management disciplines or methodologies"*

- Organizational risks – this category includes *"resource conflicts due to multiple projects occurring at the same time in the organization; scope, time, and cost objectives that are unrealistic given the organization's resources or structure; and lack of funding for the project or diverting funds from this project to other projects"*
- External risks – *"the external risk category includes those things external to the project, such as new laws or regulations, labor issues, weather, changes in ownership, and foreign policy for projects performed in other countries"*

Each category can be defined by the nature of the project or organization. A project related to Information Technology may have more risks in the technical category, where a construction project in the external risks category (Heldeman 2005).

These risks should be managed throughout the project cycle using a project risk management process that is described by Kerzner (2013) in four areas: risk planning, risk assessment, risk handling, and risk monitoring. Risk planning is the development of a strategy for handling risk and methods for analyzing, responding and monitoring risks.

Risk Assessment

Risk assessment includes identifying and analyzing risks in order to examine the critical areas and estimate the likelihood of the risk (Kerzner 2013). For the identification of risks, techniques like checklists and analyzing historical data from similar projects are good techniques for companies to gain experience in risk management (Lock 2007). Additionally, brainstorm sessions, if a proper and open discussion environment is created, are helpful for identifying all the possible risks.

Lock (2007) further added that after the identification phase, a stage of appraisal and analysis should be held, where some of the risks are filtered and others are underlined. Two types of analysis can be conducted: qualitative or quantitative.

Qualitative risk analysis focuses on considering risks in a descriptive way and imagine multiple possibilities that can affect the project. Techniques such as fault-tree analysis and Ishikawa fishbone diagram can be used in this stage.

On the other hand, qualitative risk analysis is a more advanced analysis that qualitative since it also provides a quantification of the impact or assigns a score to the risk that can then be used to create response plans. The failure mode effective critical analysis (FMECA), c.f. Figure 6, can be used as a qualitative method by providing each possibility parameter a score from 1 to 5, instead of a qualitative score such as Low/Medium/High. The product of each parameter in consideration creates a score for each risk, and after this exercise, risk can be ranked with the highest priority risk on top of the list.

	Item	Failure mode	Cause of failure	Effect	Chance	Severity	Detection difficulty	Total ranking
1	Project manager's car	Engine refuses to start	Poor maintenance	Project manager marooned at remote site with no other means of transport	2	1	3	6
2	Main building	Building collapses during installation of heavy machinery	Errors in floor loading calculations	Personal injuries Project delays Loss of reputation	1	5	3	15
3		Building collapses during installation of heavy machinery	Floor slabs incorrectly poured	Personal injuries Project delays Loss of reputation	1	5	2	10

Figure 6 - Part of a failure mode effect and criticality analysis matrix. Source: Lock (2007)

Risk Handling

In response to the risks identified, risk handling contains actions that implement measures to control risks with a person responsible for the actions and multiple risk response strategies (Kerzner 2013). Heldman et al. (2005) present several strategies that are assigned to risk owners whom responsibility is to control and apply those strategies that are classified in four categories:

- Strategies for negative risks or threats
    - Avoid – risk avoidance means that the cause of the risk is eliminated or project plan is deviated in order to avoid it;
    - Transfer – the risk is transferred to a third party entity, however, it still continues to exist;
    - Mitigate – this strategy looks to reduce the likelihood and impact of a risk in the project into an acceptable level.
- Strategies for positive risks or opportunities
    - Exploit – if a positive risk is identified that the organization wants to make the occurrence certain, exploiting the risk is the correct strategy.
    - Share – this strategy is similar to transfer but for positive risks. In these cases, a third party that is able to exploit the risk joins the project.
    - Enhance – enhancing a risk is applied to positive risks and aims to enhance likelihood and impact.
- Strategies for both threats and opportunities
    - Acceptance – this strategy can be used for both type of risks and consists of accepting the risk since it cannot be handled by the team, per instance. However, there are two types of acceptance: passive acceptance and active acceptance. Passive acceptance is a strategy where no other plans are created for dealing with risks and the consequences are accepted. Active acceptance is a strategy were a contingency plan may be created to deal with risks if they occur.
- Contingence response strategy
    - Contingence plan – this strategy is based on the creation of a plan to deal with risks in case of occurrence. This response is different from the mitigation strategy since it does not look for reducing impact or likelihood.

All the risks and response plans must be monitored. Therefore, risk monitoring is an ongoing process during the project that tracks and evaluates the risk response performance and risk profile of the project. The inputs from this exercise are used to improve and update risk handling strategies.

2.4 Agile Development with Scrum

Project management for information systems has involved in the past decade and deviated from the original methodology of project management more orientated to industrial engineering (Cervone 2011). Furthermore, Cervone (2011) added that the usage of traditional project management for software development has clear disadvantages such as the extensive planning phase and late development stage when requirements could have already change.

Therefore, Agile is a philosophy and a set of development guidelines for software development (Pressman 2010) as an answer for eager business communities and fast growing internet software companies seeking for lighter weight, faster and nimbler development practices (Abrahamsson et al. 2002).

Highsmith and Cockburn (2001) further adds that *"One aspect of agile development is often missed or glossed over: a world view that organizations are complex adaptive systems. A complex adaptive system is one in which decentralized, independent individuals interact in self organizing ways, guided by a set of simple, generative rules, to create innovative, emergent results."*.

Currently, several approaches for implementing Agile methodology are available, however, all of them based on four core principles of the "Manifesto for Agile Software Development" (Cervone 2011):

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

Scrum

One of the most used methods for managing Agile software development is Scrum – used by Google, Yahoo, Symantec and Microsoft (Shore 2007) and developed by Jeff Sutherland in the early 1990s (Pressman 2010). Scrum has as primary premise the idea that software development is too complex to be completely planned before execution and, therefore, empirical control should be applied in order to quickly adapt to changes using an iterative and incremental process (Mahnic and Drnovscek 2005).

The Scrum framework is aligned with Agile manifesto development activities: requirements, analysis, design, evolution, and delivery (Pressman 2010). Each activity is inserted in a standardized time window, usually 30 days, where the tasks are completed and the output of this iteration is a product increment, denominated *sprint* (Mahnic and Drnovscek 2005).

Each iteration, *sprint*, is implemented through three roles (Mahnic and Drnovscek 2005):

- Product owner - responsible for the aligning stakeholders' interests in the project and for prioritizing product backlog, using the list of requirements and estimating delivery times;
- Scrum master – is a new project management role introduced by Scrum and is responsible that the project goes accordingly to the practices, values and rules of Scrum. Additionally, is responsible for removing any impediments that can affect team productivity and, therefore, works very closely with the team and customer during the project (Abrahamsson et al. 2002);

- Scrum team – the development of the product is the Scrum team responsibility. These teams are self-managing, self-organizing, and cross-functional. In each increment, the project team is responsible for understanding how to turn product backlog into a functionality and manage the work to do so (Mahnic and Drnovscek 2005).

The Scrum process flow is illustrated in the Figure 7 and is overviewed by Mahnic and Drnovscek (2005). For prioritizing the product backlog, a sprint backlog is assigned that will be executed during a sprint by the project team. In the sprint planning meeting, the product owner presents the backlog to the team, and together with the Scrum master, time is estimated for each task. A final decision is taken in what can be achieved in the sprint.

Throughout the sprint, the team gathers daily for a 15 minute meeting, designated *Daily Scrum* in order to align work for the day. Each stakeholder must answer three questions and the Scrum master uses these inputs to facilitate the team work:

1. What have you done on this project since the last Daily Scrum Meeting?
2. What will you do before the next meeting?
3. Do you have any obstacles?

At the end of the sprint, the sprint review meeting is held so the team can present the developed work to the product owner and other stakeholders. Additionally, a sprint retrospective is conducted by the Scrum master before the next sprint, gather lessons learn and improve framework procedures for the next sprint.

"Together, the Sprint planning meeting, the Daily Scrum, the Sprint review, and the Sprint retrospective constitute the empirical inspection and adaptation practices of Scrum." (Mahnic and Drnovscek 2005).

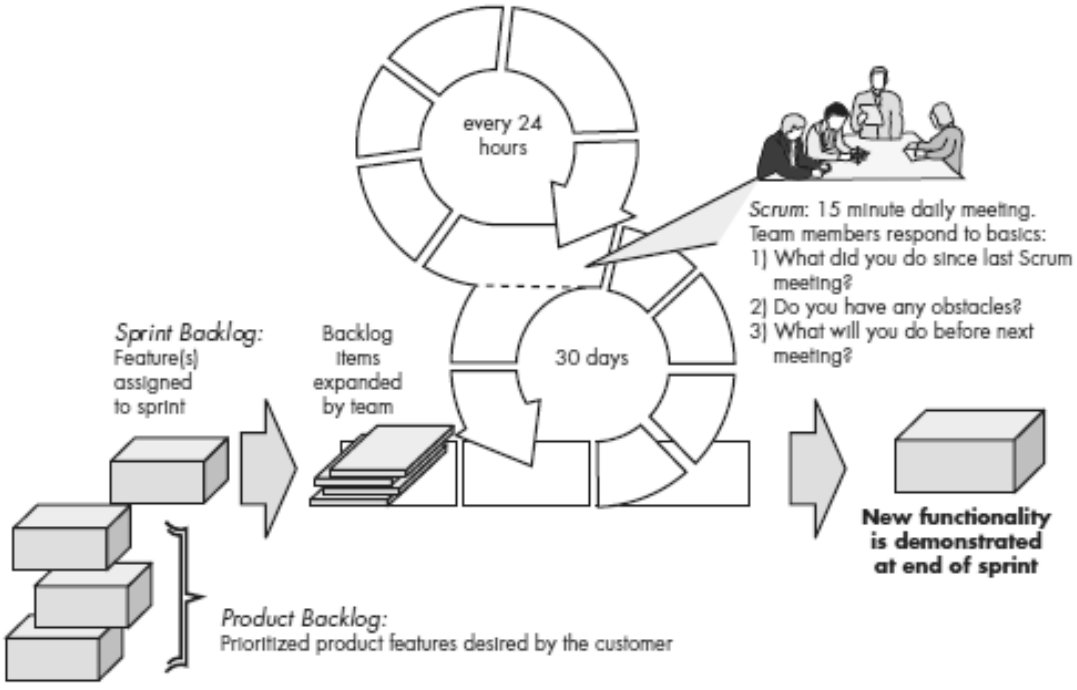

Figure 7 - Scrum process flow. Source: Pressman (2010)

3 Project Management Framework

In this chapter the new framework for managing cross functional projects will be explained and detailed as well as the tools to support it.

3.1 Previous Project Management at Farfetch

In the previous years of Farfetch, the concept of a project manager was not present in the organization and projects were managed mainly by product owners when the project needs were primarily technical. Product owners integrate the Tech team and are responsible for managing Farfetch products – website, mobile applications, internal software for managing operations, and other innovative products.

The continuous expansion of the business lead to a better defined and better structured organization. The functional structure of Farfetch is composed by seven separate areas, Figure 8, and several projects include at least two of these areas.

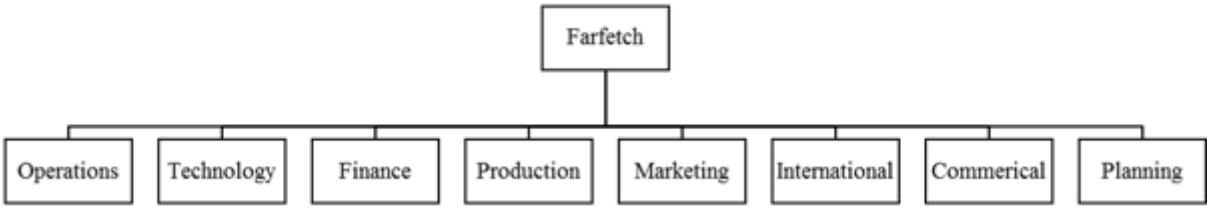

Figure 8 - Functional Structure

As the Farfetch product is software, projects with a considerable size are very likely to need the Tech team involvement to do the implementation. Therefore, product owners took the lead managing those projects regardless of the functional area they were part of. This paradigm of management was quick and flexible in the beginning, but it was not sustainable in the long run.

When a new project needs to be executed, the responsible for gathering business needs from the several stakeholders were the product owners that were also performing as project managers. Having projects from Operations, Finance, International and others, product owners had to go beyond their own functional areas, which was neither efficient nor effective.

In order to ease product owners' workload and have dedicated people to project control, the role of project manager was created within some functional areas with a bigger project portfolio, such as the Operations team.

Nonetheless, some of the problems still remained to exist as a result of a hybrid organizational structure and remnants of a startup mindset. Project managers were allocated within the natural teams and the old model of management by the product owners created clutter regarding responsibilities and tasks assignment. Each project was managed without a

standardized method, with no clear and distinct evaluation, lack of visibility over the projects and an unsuitable communication plan to all the stakeholders.

Furthermore, project portfolio ranking and prioritization was done based on a superficial assessment and variables such as the financial return, associated risk and efficiency were neglected in detriment of the company's strategy, customer needs and foreknowledge.

With scarcity of documentation and management processes, benefits and goals became hard to measure and control. This behavior is not suitable for learning and growing, since neither the objectives nor the outcomes are defined.

3.2 The New Paradigm

The creation of a common basis for growing the business was the main goal of a global framework for managing projects where each project is evaluated with the same criteria and overseen with a clear and distinct process. During the execution of projects, stakeholders are faced with this questions:

- Who is responsible for the project?
- When are we doing this?
- Why are we doing this project?
- How should we address this?

In order answer to the first question, the Project Management function was redefined with the creation of a Cross Functional Team composed by project managers from all areas of the company, assigning dedicated team responsible for all projects.

Concerning time allocation and project prioritization, a cross functional committee – formed by people from all functional areas – is responsible for evaluating the project portfolio and decide based on a data driven analysis when which project should be executed. Before going into the execution phase of a project, multiple factors have to be considered and justified to the business sponsors and committee.

The answer for the last two questions is a standardized four step approach for managing new projects. With defined tasks and deliverables in each step, the stakeholders will have visibility over the project with all the documentation created and the next steps for developing the solution.

In the following subchapters, the Cross Functional Team and roles will be explained as well as the process of project evaluation by the cross functional committee. Concluding, the four step approach will be presented as well as the tools developed to complement it.

3.3 Cross Functional Team and Roles

The cross functional team is composed by a group of project managers that integrate multiple functional areas of Farfetch and will be responsible for the new cross functional projects. However, in order to have dedicated people to each area, the cross functional team is not a tangible hierarchical team but a group of stakeholders from each department that will be working with cross functional projects where the scope is mainly their natural team. This type of structure is, as described by Lock (2007), a functional structure.

For instance, a project that directly impacts Delivery Team – team responsible for managing order delivering – will be managed by the stakeholder dedicated to project management that is part of that natural team and, at the same time, part of the Cross Functional Team.

The breakdown of the Cross Functional Team structure regarding Operations department is illustrated in the Figure 9.

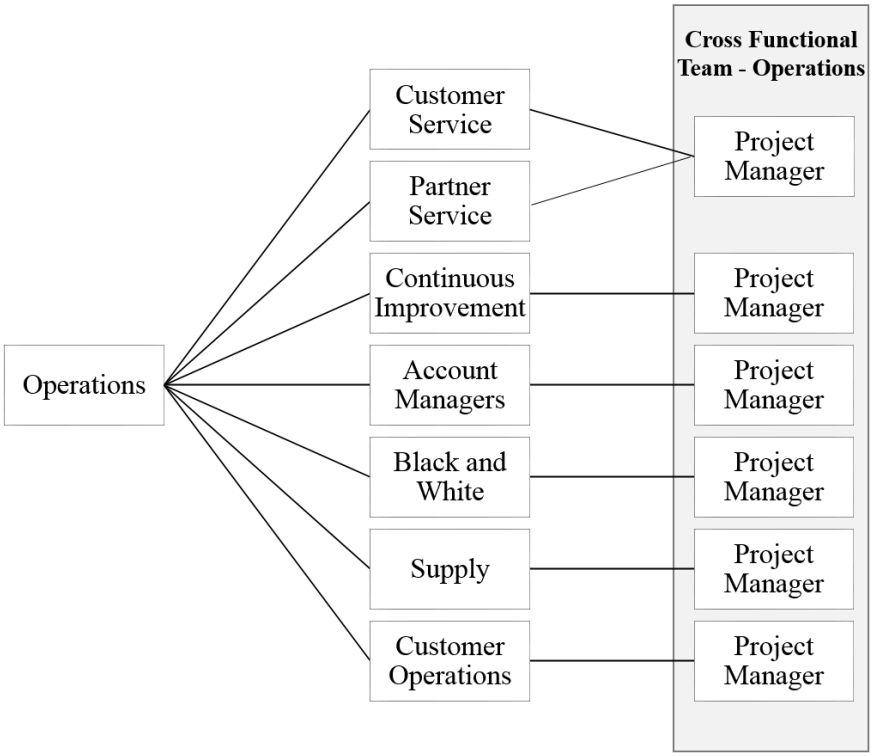

Figure 9 - Cross Functional Team Structure - Operations

Project Manager

When a new project needs to be executed, the project manager is responsible for planning and coordinating the project timeline and ensure alignment. Additionally, he is also responsible for gathering all the information, together with the stakeholders, in order to justify the project to the business sponsor and use that information and needs to communicate with the product owner lead.

Besides that, project manager is responsible for guaranteeing that the project management framework is being followed and reports the status to stakeholders, escalating risks and dependencies as needed.

Product Owner

The product owner lead works with the product structure and coordinate all other product owners that are relevant for each project. Due to the cluster structure in the Tech team and different project roadmaps for each cluster, product owners have to work closely to assess the impact of a new project. Ultimately, the product owner lead and the project manager depend on each other to successfully execute a project since the first stage, when the product owner lead has to understand business needs and present a product solution, until the execution and implementation where progress status is discussed and corrective measures are undertaken.

Business Sponsor

This role is crucial for new projects since the business sponsor is the owner of the project, within the company. Therefore, it is his responsibility to assess project viability with the data fed by the project manager collected with all the other stakeholders, using a deeper knowledge of the organization and its strategy.

The business sponsor and the project team collaborate towards the same goal, with the project manager making sure that everything runs accordingly to the plan and the business sponsor

evaluating project results and having power to revoke the project if the business case is no longer viable.

Project Team

For the correct identification of the business needs, data analysis, process mapping and study of needs, multiple stakeholders have to be involved. They are managed within their natural teams and coordinated by the project manager regarding the cross functional project.

3.4 Cross Functional Committee

For an organization to thrive, it is not enough to do the things right – through a solid Project Management Framework with a well-organized team – but also to do the right things (Dinsmore and Cooke-Davies 2005). The entity incumbent for this is the cross functional committee, reviewing new projects and allocating the right people from the proper areas.

This strategic committee helps Farfetch to achieve organization objectives by managing consistent and repeatable processes that support the successful implementation of programs and projects. Cross functional committee main goal is to classify and prioritize projects as well as present recommendations to the Executive Board.

In order to get an unbiased classification, the cross functional committee is formed by one stakeholder from Farfetch functional areas represented in Figure 8 - Functional Structure.

A monthly meeting with the agents will be conducted in order to review new initiatives, consider trade-offs and prioritize them. Figure 10 illustrates the strategic planning process where cross functional committee is responsible for the evaluation of new projects.

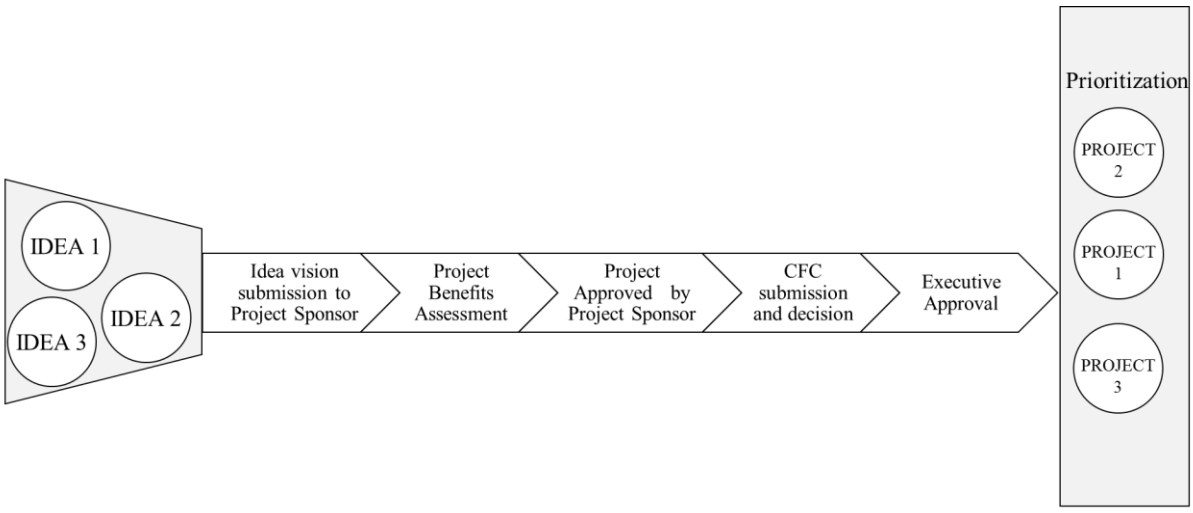

Figure 10 - Strategic planning process

The portfolio is revised on a monthly basis. Besides, in this exercise a complete study of the project and its potential is necessary before strategic decisions are taken. This makes it easier to evaluate risks, benefits and budget constraints.

Creating this process will enhance the visibility of project portfolio, pipeline and all the dependencies across the organization and the management. The framework will create a strategic function in charge of coordinating projects and communicating issues and dependencies for the stakeholders, avoiding disorientation and enhancing project execution.

A good strategic planning aligned with a complete project management framework are the foundation for the continuous business development and implementation of new ideas.

3.5 Project Framework Phases

Previous project management practices at Farfetch were inadequate for the organization needs, specifically for Cross Functional Projects. Expectations and dependencies were not being managed properly which led to greater problems, namely project time discrepancies.

The strategic alignment provided by the cross functional committee is vital for the organization to understand in which direction is going and although the first step of business value creation is defining and planning the right things, the following step, Project Management, is the phase in charge of doing the right things right.

Hence, project execution phases and methodology have to be clear and spread across the organization. The Project Management Framework, is structured into four different stages (c.f. Figure 11). Each stage execution requires the creation of certain deliverables with multiple purposes such as analysis, control and communication.

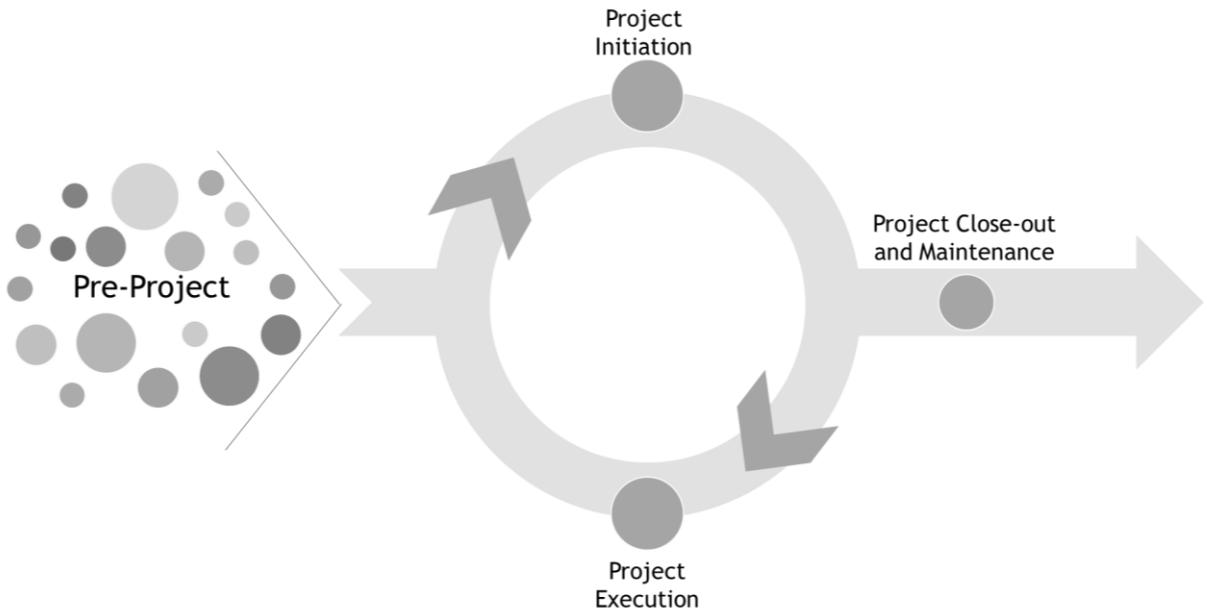

Figure 11 - Project management framework phases

The first stage, Pre-Project, focus on evaluating the project potential in order to correctly prioritize projects. A final decision is made by the cross functional committee based on the first study and the project advances to the next stage or is ended.

The following stage, Project Initiation, is where the solution is created and project management tools are used to control project goals. This phase requires that the project manager and product owner lead collaborate closely to identify needs and requirements. Based on the outcomes of the deeper analysis and solution value, the project advances to the implementation stage or is terminated. Nonetheless, the complete study and plan is not mandatory for the project to advance to the next stage, since this approach looks to be agile and stages can overlap.

In the Project Execution, the Tech team is mainly responsible and the development team implements the solution, using the Scrum framework. However, other areas affected by the project are still involved and may have to complete non-technical tasks.

When the product is completed, the project is closed and in the last stage, the team evaluates the outcomes and lessons learned. Additionally, a financial analysis is conducted and compared to the forecasted values.

In this section the four stages will be presented in depth together with the tools developed to complement them.

3.5.1 Pre-Project

A new idea or problem identification by itself is not enough for starting a new project. This is the stage where the project is justified through different perspectives and a final decision is taken regarding the execution and the schedule. Beyond evaluating the solution results, this phase is about estimating the project potential, once that project maturity is not sufficient for judging the solution benefits.

As a result of Farfetch startup essence, it is common for projects to emerge from within the stakeholders that have a new vision for a product, feature, service or a solution for a problem. However, the executive level takes part on the value creation and also assigns strategic new projects for a deeper study. With this phase, a neutral assessment is conducted independent of the project origin in order to correctly prioritize and expand the business.

In both cases, the project does not exist without a business sponsor that, as stated before, is the main stakeholder of the initiative and the person ultimately accountable for communicating the business needs to the project manager and product owner lead.

Also in this project stage, a project manager is assigned that may or may not be the person submitting the idea, depending on the functional area that is mainly involved. The project manager must work together with other stakeholders to fully understand the project nature and collect data to justify project execution.

A product owner lead can be assigned at this stage however it can change until the project scope is fully defined. Product owner lead undertakes the responsibility on this stage of conducting a preliminary technical assessment of what needs to be done and report it to the project manager.

The business sponsor role is crucial for running a prior evaluation of the idea, assessing benefits and impacts. The absence of a preliminary appraisal would result in a poor resource allocation considering that stakeholders would be wasting resources and investing time without the business sponsor global vision judgment. In the past, business sponsor approval was made without a cross organizational method. Therefore, this project phase provides a standard for prioritizing and evaluating projects.

Project Vision

A template was created for submitting the Project Vision to the main stakeholder that must be completed for every idea and it is a mandatory deliverable for the Pre-Project stage. The Project Vision template is a practical and easy-to-use tool that combines four sections - Annex A:

- Project context and objectives;
- Main requirements identified;
- Business and technical areas impacted;
- Main risks, assumptions and dependencies.

In the first section, the project manager is supposed to explain the current context of the problem or idea, providing the business sponsor an overview of what is being done currently. Additionally, the primary objectives of the initiative are illustrated and main challenges or needs as well. In case of a project that seeks to improve internal processes, the objectives can be specified using key performance indicators or benchmarks.

The following section is bound to identify project's requirements, e.g. what functions the product must be able to perform in case of. Requirements are inputs used by the Tech Team to create a solution and develop the product. This is crucial for Farfetch since software development is the main source of labor.

With all the tech requirements gathered, the project manager should address the product owner lead to understand which teams the project would affect. The product owner lead must gather different opinion from its team and other product owners that should be involved.

The last section of the template grants the business sponsor a global view of main risks that can occur during the execution or as a result of not implementing the project, assumptions made that serve as foundation for the solution, and dependencies with other organization projects or even teams' timelines.

Although this deliverable is complete in a sense of summarizing in just one presentation slide the project scope, the project manager should provide additional data to justify the Project Vision template content, preferably during a meeting presentation.

The aggregation of this sections serve as a nimble and flexible tool to assess project viability and possible challenges. The submission of this artifact to the main stakeholder is a clear moment in time where ideas and alternatives are debated, excluded or included and a final decision is taken whether the idea continues to a deeper analysis or it is stopped. This paradigm rupture will have significant impacts on the project pipeline for prioritization.

In case of a positive response to the concept by the business sponsor, the project advances to a deeper study phase where project complete potential is appraised. At this point, more resources are allocated, such as business analysts to perform project research.

This following sub-stage has as final outcome the complete study of project potential that can already contemplate a partial or complete solution. Using the research outcomes, the business sponsor decides if this project will generate value for the company and is suitable for presenting to the cross functional committee.

Project Scoreboard

The major problem faced when analyzing all this relevant data was preparing it for comparison with the remaining projects. Due to the fact that the cross functional committee is not aware of every detail, the business sponsor is expected to present pertinent data to the committee. However, it was still hard to select which each project variable must be evaluated to correctly compare different projects with different scope and dimensions. Therefore, a simple and easy tool was created to facilitate this exercise - the project scoreboard.

Focusing on four different perspectives, the project scoreboard contemplates nine different variables that are often used by the project managers and business sponsors to classify projects, however, until now, without a methodic approach. This tool - Figure 12 - is essentially a matrix where each parameter is weighted based on its importance to the business, and the score varies from 0 to 5, based on a scoring matrix.

The scoring matrix (Annex B) was created in order to standardize project scoring. When classifying the same project, different stakeholders would assign different scores due to variable subjectivity. Therefore, for each parameter considered in the project scoreboard, there is a clear definition of what each score, from 0 to 5, represents.

The first step on creating this tool was to collect data close to the decision level stakeholders and understand which parameters they value. The aggregation of this would not be complete and sufficient, since each parameter has its importance and they should not be looked in the same way.

Therefore, the weight given to each one was decided in an executive level and will be reviewed when Farfetch objectives change and, as consequence, the value of each field also changes.

		Weight	Project
Costs	Capital Investment	7,5%	5
	Effort	10,0%	5
Benefits	GMV Uplift	20,0%	0
	Operational Costs Savings	7,5%	4
Business	Strategy Alignment	20,0%	2
	Competitive Advantage	10,0%	0
	Performance Improvement	5,0%	4
Customer	Customer Orientation	12,5%	1
	Boutique Orientation	7,5%	5
Score		100%	**2,28**

Figure 12 - Project scoreboard

The costs perspective gives visibility to the level of resources commitment necessary to run the project. Capital Investment parameter provides the financial perspective of how much money will be spent for this project - as a result of outsourcing a service, hiring more people, etc. while the effort quantifies time and teams needed for execution. Basically, how much internal resources have to be used and for how long.

Estimating the benefits of a given project is critical for project judgement once this is the key source of revenue. Earnings can be looked in two types, Gross Merchandise Value uplift and Operational Costs savings. The first illustrates sales generated by the initiative and it is one of the most important key performance indicator for Farfetch - measures total sales value.

Operational costs savings estimate work labor that can be reduced with the implementation of the project. In areas of Farfetch such as Customer Service, operational vicissitudes and perpetual innovation create the need for implementing new projects that improve team productivity and reduce the amount of work needed. This parameter is important for valuing sustainable growth.

Business group KPIs represent the biggest weight for the Project Scoreboard and these are more strategic and qualitative based parameters. When creating new and disruptive products, a costs benefits analysis is insufficient to classify project potential and Farfetch would lose innovative projects neglecting other concepts like strategy and customers.

At an executive level, Farfetch revises its strategic pillars for the year that serve as a foundation for project portfolio optimization. Therefore, this group is scored based on how many strategic pillars the project is aligned with.

Competitive advantage is a characteristic that the organization looks to and this is evaluated based on the percentage of that competitors can be outperformed with the project execution.

Business KPIs and Teams KPIs are important for the organization and some projects may affect them. Thus, Performance improvement acknowledge these aspects and the score is given depending on the number of KPIs affected and its nature.

Due to its business nature, Farfetch has two types of customers that need to please. The first one is the final customer and so project prioritization must consider this component. Scoring is assigned based on percentage of customers reached with the project.

Following the same logic, the relationship with the boutiques are extremely important since they hold our inventory. Projects that affect positively the boutique are valuable for the business.

The conjugation of all the previously stated factors, with a weighted value and final score, serve as a valuable tool for cross functional committee project prioritization. The project submission to the CFC must combine various analysis that are relevant, the completed project vision template and project scoreboard in order to have a final decision on the project execution and its timeline.

3.5.2 Project Initiation

Project initiation is the second phase of the approach and depends on the first stage final decision. This phase is where the solution begins to be created and all the functional teams involved work closely with the Tech team in order to create both functional and non-functional requirements. Furthermore, a detailed business case is completed with mandatory deliverables that will be presented in this section.

A kick-off meeting determines the beginning of the project initiation, and it is the moment that serves for assigning responsibilities, discuss project scope with stakeholders and report objectives and status. In this meeting, the project stakeholders must be present in order to be efficient and to effectively assign tasks and create a project timeline.

In the past, this kick off meeting was not clearly defined, was lacking a structured method to conduct it and, depending on the project manager methodology, the outputs were different. One of the most frequent issues identified at Farfetch is the difficulty in managing responsibilities throughout the project. Therefore, the need for a tool to better handle this was clear and a RACI Matrix was implemented to ease project management work.

RACI Matrix

The RACI Matrix - Figure 13 - is a tool that consolidates multiple macro tasks of a project and provides visibility of the project and responsibilities. This exercise must be conducted in the kick off meeting in order to have people alignment since the starting point.

The four step approach defines some deliverables that must be completed. However, multiple exercises may be necessary to complete and therefore those tasks must be contemplated in the responsibility assignment matrix. A rigid structure for the RACI matrix would not be appropriate for Farfetch project management framework due to the range of projects that the organization undertakes.

There are four types of responsibilities that can be assigned:

- Responsible (R) – the main responsible for achieving the task respecting timeline.
- Accountable (A) – the responsible for delivering work tasks to other stakeholders.
- Consulted (C) – stakeholders that should be consulted since they have valuable inputs that must be considered.
- Informed (I) – this responsibility assures that everyone is aware of the project progress and avoids confusion and misunderstandings.

As illustrated in Cross Functional Team and Roles section, there are four main roles. Although business sponsor, project manager and product owner lead are clearly defined in

number and duties, the other stakeholders can have multiple tasks, such as business analyst, team leaders or area managers within the project scope.

Along with the project, new tasks and new stakeholders may be included and so this matrix has to be updated throughout the project in every stage.

As a result of the adequate responsibilities assignment and communication, the project can be planned and executed with less entropy. The following step is to create the business case which is a document that aggregates all the important information, solution creation, scenario analysis, main issues and dependencies, among others that are relevant for the project. Creating documentation at Farfetch has an extreme importance in building a foundation for learning and improving.

RACI MATRIX		BS	PM	POL	PA	STAKEHOLDERS			
		Business Sponsor	Project Manager	Product Owner Lead	Project Analyst	Stakeholders	Stakeholders	Stakeholders	Stakeholders
Pre-Project	Project Vision	A	R	C	I	I	C	C	I
	Project Scorecard	R	A	C	R	I	C	C	C
Initiation	Responsibilities	C	A	R	I	I	I	I	I
	Project plan	C	A	R	I	I	I	C	C
	Business case	C	A	R	R	I	I	C	C
	Requirements list	C	R	A	I	C	C	C	C
	Sucess and exit criteria definition	C	A	R	C	I	C	C	C
	Control Dashboard	I	R	I	A	I	I	I	I
Execution	Execution control	I	R	R	I	I	I	I	I
	Implementation checklist	I	R	A	I	I	I	I	I
	Testing strategy	I	A	R	I	I	C	C	C
Close Out	Close out meeting	I	A	I	I	I	I	I	I
	Financial Analysis	I	R	I	A	I	I	I	I
	Project Results Control	I	R	I	A	I	I	I	I

Figure 13 - RACI matrix

Financial Analysis

One of the biggest flaws was the absence of a financial analysis to assess possible earnings and costs of project. Besides that, a financial analysis is highly relevant for decision making process regarding project execution.

The financial analysis must be conducted based on the solution created, instead of the potential that is evaluated in the Pre-Project phase. Consequently, this analysis uses inputs from all the areas involved. The project manager and business analysts must gather information regarding solution benefits with multiple scenarios, and estimate benefits in a three-year period. In a fast pace market, such as e-commerce, products and features become obsolete rapidly and so a three-year period was considered to be a valid period for analysis.

Taking in consideration the complete absence of this approach previously at Farfetch, a financial analysis excel file, Annex C, was created in order to serve as tool for analyst without a previous financial background to create a correct financial assessment. This analysis is segmented into two main areas: Costs and Benefits.

Benefits generated from a project can have a multiple nature. In case of a project that is extremely customer orientated, looking to improve experience and provide a new product, it is expected to drastically increase sales – measured as GMV.

On the other hand, projects that impact operational performance and workforce effort, will impact operational costs that can be looked at as a saving. Both of this parameters are included in the project scoreboard, completed in the Pre-Project phase, since these are the main source of revenue/savings for Farfetch.

The responsibility of the correct assessment of benefits is on charge of the business analysts that have to estimate the benefits based on the created solution and forecast values for the next three years. This prediction can be based on business targets of even historical data where a clear relationship can be observed.

Regarding expenses, Farfetch costs can be divided into three classes. One of the most evident, and in many projects the most significant, is the development cost. As previously said, Farfetch holds no inventory and does not own any warehouse neither produces physical products.

Therefore, Farfetch product is in form of software code that incorporate web pages and internal software. What this means is that costs are incorporated into Farfetch developers wages and the tradeoff cost of executing one project in detriment of another. This tradeoff is a result of the prioritization that has to be done as a result of limited resources and the rapid expansion that could not keep up with the offer for developers.

The calculation for the implementation cost is based on the number of teams involved in the project. A big project that affects multiple Tech team clusters, will have a greater impact on the team occupancy. Nonetheless, each project is not demanding in the same way for every team, and based on the agile project management culture that Tech team uses as framework for product development, they divide the work into short time windows, two weeks, named *sprints* where they work to deliver a product or feature.

Depending on the complexity and number of tasks for each team, the number of sprints can vary and also the dedicated time. This means that a team responsible for the Payment Check-out on the website can have ten developers but they will be working on two projects simultaneously, and will only dedicate 50% of their time to the project in consideration. The excel sheet provides a template for calculating these times, where the inputs are: number of teams; number of sprints; number of developers; percentage of dedicated time; and wage per hour.

Automatically, the excel sheets calculates this value and does not allow variations on this type of estimate, using the following equation.

$$Implementation\ Cost = \sum_{i=1}^{n} d_i * s_i * w_i * c_i$$

Where:

n – Number of sprints

d – Number of developers

s – Number of sprints

w – Medium wage per hour

c – Percentage of dedicated time

Additionally, some projects may require hiring more employees in order to meet deadlines or even control new business models. This costs must be added to the costs for the next years, since this creates new operational expenses.

Besides implementation costs, some projects may require signing a contract for a provider of services. Generally, Farfetch develops its own products, even for internal management. However, some projects and features may require a third party that is specialized in providing specific products or services that would not be profitable for Farfetch to develop. In those cases, the project requires a contract signing and perhaps loyalty fees for the following years.

Furthermore, new disruptive projects may create the need of a new form of investment, like capital investment or even assets acquisition. Despite of its business model, Farfetch is growing and innovative opportunities can take place and so they are contemplated in the calculation sheet.

Using all the inputs, costs and benefits, the sheet calculates five financial metrics that can be used to assess project financial viability: Return on Investment; Net Present Value; Payback Period; Internal Rate of Return; Benefit/Cost ratio.

This calculation is made using discounted cash flow in order to estimate the project value today. The discount rate used is weighted average cost of capital for Farfetch – WAAC. Return on Investment and Net Present Value are metrics frequently used to determine whether a project is attractive or not. Prior to this, there was no estimation for medium and small size projects, and just executive level had visibility over project value of considerable size projects that demanded bigger investments.

In order to plan for all the possibilities and have a more accurate value, the financial analysis must consider three scenario hypothesis. A most likely scenario, best case scenario and worst case. Using the three-point estimation technique, an approximate probability distribution is obtained.

The importance of a financial analysis is evident both for budget control and for project portfolio planning, notwithstanding other factors must be considered. Studying the risk associated with the project was not considered while managing a project. However, projects kept growing in size and complexity and managing a project became a harder job.

Consequently, some projects got delayed and canceled due to issues that could have been avoided with the registration of risks and taking corrective measures to control them. To facilitate this registration and project risk classification, a tool was developed to control, from this perspective, projects.

Risk Assessment

Risks should not be addressed only as threats but also as opportunities. Therefore, the project team needs to identify risks that can occur and how to respond to them. Risk can have an internal or external origin and have impact on the project execution and scope.

Risk assessment combined with a proper response plan will keep the project risk controlled throughout the execution and the project manager will have visibility over the risks if everything is documented. The process designed for the risk assessment is illustrated bellow in the Figure 14.

The first actions when conducting the risk analysis is to create open discussions where risks are enumerated. The main challenge is to create a mindset orientated to risk. Techniques like SWOT analysis, brainstorm sessions and surveys to stakeholders are very useful for identifying risks (Lock 2007).

After the identification, the project manager should coordinate the discussion towards the assessment of the impact and likelihood of the event. A risk can impact Farfetch projects in four factors: scope; schedule; costs; and benefits.

As a consequence of the fast growth and an inexistent risk documentation, historical data is not available for study the probability of a risk incident. Additionally, the fast pace of Farfetch and the uniqueness of the business does not facilitate risk prediction in a probabilistic analysis.

Thus, likelihood is assessed in a qualitative estimation and converted into values between 0 - 100% of impact. Each of the four factors has the same weight, 25%, and the weighted risk score for each risk is automatically calculated by the excel sheet – Annex D. When this exercise is complete for all the risks, a total score rating for the project is assigned.

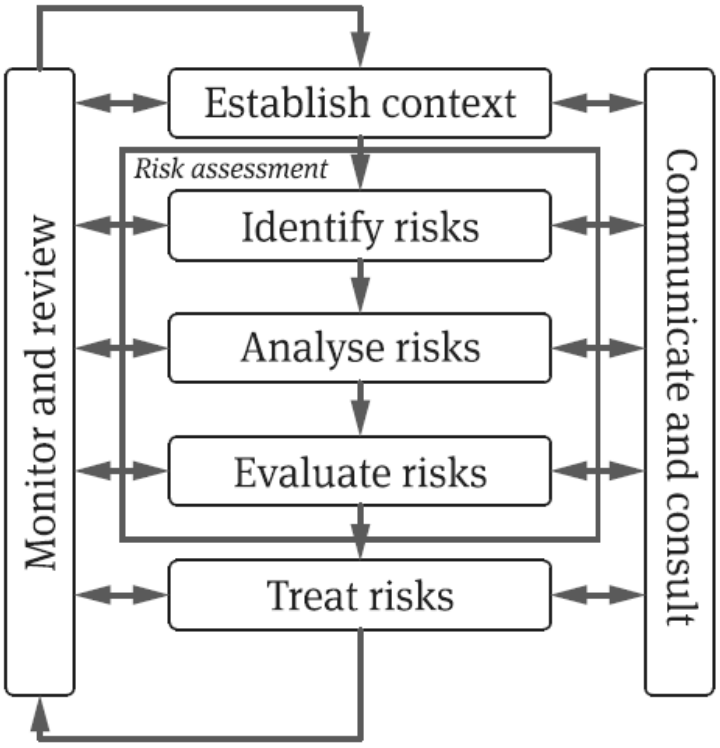

Figure 14 - The risk management process. Source: ISO 31000:2009

For each risk, an action must be taken and a responsible person is assigned to control it. There are several risk responses previous detailed in the sub section 2.3:

- Avoid
- Transfer
- Mitigate
- Exploit
- Share
- Enhance
- Acceptance
- Contingence plan

The response plan, if correctly executed, will have impact on the risk rating of the project and the project manager should revise the risk rating each week. A control dashboard, Figure 15, is automatically generated by the calculation sheet for the risk control of the project.

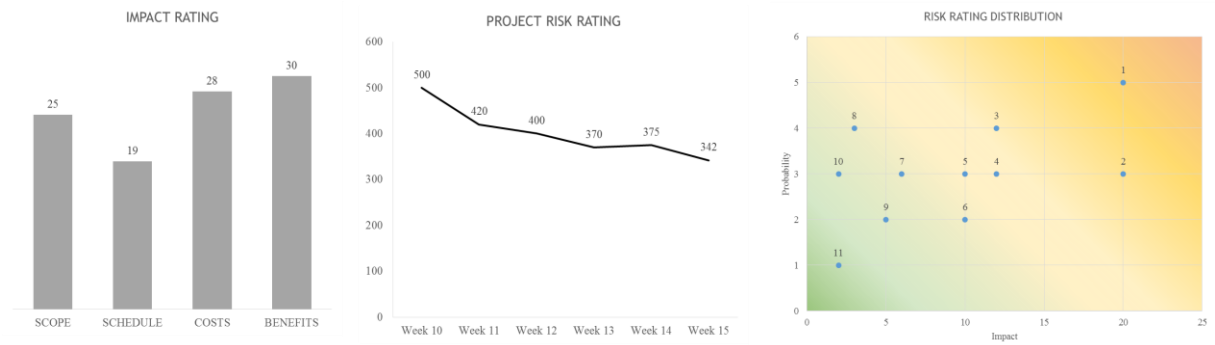

Figure 15 - Risk rating control dashboard

The visibility and documentation given to this aspect of project management has extreme importance and will prevent incidents and corrective measures.

The tools and techniques explained before such as the RACI matrix, Financial Analysis and Risk analysis are all the actions for the Project Initiation Stage. The aggregation of the output of these tools with a well thought solution are the foundation for a solid business case. Nonetheless, the solution and projections have to be measured and controlled during project execution and when the project is finally closed.

Along with the creation of the business plan, success and exit criteria have to be defined. The inexistence of this created the paradigm that once a project is started, it has to be finished. Sometimes, some of the risks and assumptions took in the project planning, transformed into problems and the project viability was compromised. However, without defined criteria for stopping the project, the execution kept going until it was finished.

Furthermore, project benefits were being evaluated but not documented, neither the KPIs to measure the success of a project.

In this stage, the project team has to be committed to deliver certain results that have to be defined in this stage and evaluated afterwards in the project close out. Therefore, a control dashboard has to be conceived by the project analyst where the success criteria is displayed as well as the exit criteria. Along with that, multiple metrics that the project may affect have to be considered.

This second stage focus on documentation and visibility over the project and other deliverables are mandatory for this phase to be concluded:

- Project plan – a timeline of the project tasks for the Tech team and other areas. This is a result of the solution created and requirements gathering
- Communication plan – defined dates where project milestones are communicated to all the stakeholders: project execution start; testing; project roll out; close out meeting; between others.

When the solution or part of it is created and the Tech team can start developing a viable product, the business sponsor and the cross functional committee review the project viability and solution and the project advances to the next phase, Project Execution. Nonetheless, the actions and decisions that take place in this stage can and must be reviewed when new project or business needs appear.

This type of approach avoids a waterfall method where decisions made are closed and the project only advances when all the requirements and full solution is completed. Once again, this framework aims to be agile and provide a solid framework for project management where activities from different steps can overlap, in detriment of a tight and strict set of rules and procedures.

3.5.3 Project Execution

Following the initiation phase, where project details are planned, documented and justified, the development team starts project execution. At this stage, Scrum methodology for product development is mainly used by the Tech team. However, each framework complement each other in different ways. The new project management framework for cross functional initiatives provide a strategic and planning vision where Scrum provides quick product implementation and assures product quality, focusing more on an operational and execution level.

Using the requirements gathered by the project manager with technical adjustments by the product owner lead, an implementation checklist details the activities needed to successfully implement the project. This tasks can be technical orientated or business orientated. According to the business needs, some projects may require non-technical tasks to deliver the project. In case of new contracts, legislation agreements and market study needs, other teams may be involved and those tasks have to be included and a schedule assigned.

When technical tasks are completed, each team has developers doing Quality Assurance that inspect for bugs in the code and other malfunctions. This job is also scheduled for the sprint and can only be concluded when the product is partial finished.

In previous projects, quality assurance was strictly focused on a technical perspective and was lacking an operational view. The product can be perfectly developed but not meeting some of the requirements for the project team. This is more critical in case of projects in which the solution involves profound operational changes. Therefore, a testing strategy must be planned where both QA teams perform quality assurance and also other teams' stakeholders.

Since this is the last stage before project roll out, a training plan has to be created in order to prepare product users for the changes. Projects can affect both front end platforms and back office platforms, Farfetch employees have to be trained and understand product changes that directly impact their work.

If the training is performed after the roll out, this can lead into problems in real time and corrective measures had to be made. Additionally the stakeholders can find glitches and these corrections can be made before the product goes live.

All of the enumerated deliverables must be considered on a case per case basis and are not mandatory for every project since in some of them, these actions would not add value to the product and would only deviate focus from the project.

During the project execution, the project analyst is responsible for controlling project metrics and report it to the project manager. External or internal risks can have a direct impact on the project viability and the exit criteria defined in the Project Initiation phase can be met. In this case, business sponsor together with the project manager and product owner lead have to take a decision whether the project is finished or stopped.

In some cases, when possible, a pilot test can be conducted to assess the impact of the project in the stakeholders such as customer, boutiques or even Farfetch employees. This exercise can lead to a better understanding of the project outcomes and decisions can be taken upon this inputs. Changes to the project plan may require the update or execution of previous stages actions such as the financial analysis and RACI matrix.

When this stage is concluded, the new product is rolled out and the final phase of the project management framework begins.

3.5.4 Project Close-Out and Maintenance

One of the biggest flaws in the previous project management method at Farfetch was the lack of a closing ceremony and a project and results review. In the project plan defined in the Project Initiation phase, a close-out meeting is scheduled and similarly to the kick-off meeting, all the stakeholders have to be present.

In this meeting the project team does a retrospective over the project and identify the lessons learned. This exercise is important for continuously improving project management and internal processes.

Additionally, an ongoing project maintenance is defined and responsibilities are assigned for this task. In some cases, projects can be broken down into multiple phases due to its size. As so, the next actions are defined and scheduled.

Using the Financial Analysis conducted in the initiation stage, quality metrics were created to measure forecast accuracy. In order to calculate this, a final financial analysis is conducted and compared with the predicted values before project execution for each metric. The first analysis must be conducted after one year of project conclusion in order to have reliable information. The metrics measure the deviation between both the initial and final values.

$$\%\ error = \frac{NPV_t - NPV_{t-1}}{NPV_t}$$

Where:

T – Year of the analysis

NPV – Net Present Value

Using the information gathered from the financial analysis and the control dashboard, the business sponsor evaluates the project success. Corrective measures can be taken if the results are not as expected and even, in some extreme cases, the project can be rolled back to the initial state.

4 Proof of Concept

With the purpose of empirically test the developed project management framework, understand main benefits, difficulties, and possible improvements, a pilot project was managed using the framework standards and principles.

The selected project is the result of an initiative to enhance the organization's return process. Due to the initiative's dimension and complexity, this project is suitable for experimenting the new model as well as understanding challenges and needs throughout the process.

In this chapter, the problem will be presented as well as the solution created to solve it while using the project management tools and documentation procedures proposed (cf. Chapter 3).

4.1 Returns Process

One of the most common issues when shopping online is not being able to try and examine the clothes before buying it. Therefore, after the order is delivered, the customer has a 14 days period to return the item, free of charge at Farfetch.

The customer receives the returns instructions that are packed with the item and where the steps to return the order can be found. First, on the Farfetch website, the customer has to request a return and schedule the pickup time. Automatically, the carrier receives the information and the Airway Bill (AWB) is printed by the customer.

After pick up, the returned order is transported to the boutique. However, the return orders shipped from outside of the European Union enter this region via London, United Kingdom to consolidate packages and diminish costs. This is only possible since the company is based in the United Kingdom. This detour creates some problems in the tracking system since when entering the UK, the order receives a second AWB for sending it from UK to the boutique.

Boutiques have a two-day period to accept or contest the return after receiving the order. This period is available so the boutique can inspect the item and decide if the item is in good conditions. In case of damage, used item, return outside of the return period, or other reasons, the boutique can contest the return. This contest is made in STORM, the internal tool for order management.

After the two-day period, the returned order is automatically auto-accepted by the boutique. However, in case of contest, the back office Customer Service team receives a notification and a negotiation process begins. In some cases, the discussion can escalate to another department, Partner Services, where a final decision is taken.

The returned order can be accepted and the customer is refunded at the boutique expense or it is refused and accepted by Farfetch. When the condition of the item is unacceptable and the customer's returns history is faulty, the customer is not refunded and the item is sent back. Nonetheless, one of the Farfetch values is to "Amaze Customers", therefore in many cases, although the boutique rejects the return, Farfetch accepts and refunds the client. The process is illustrated in the Figure 16.

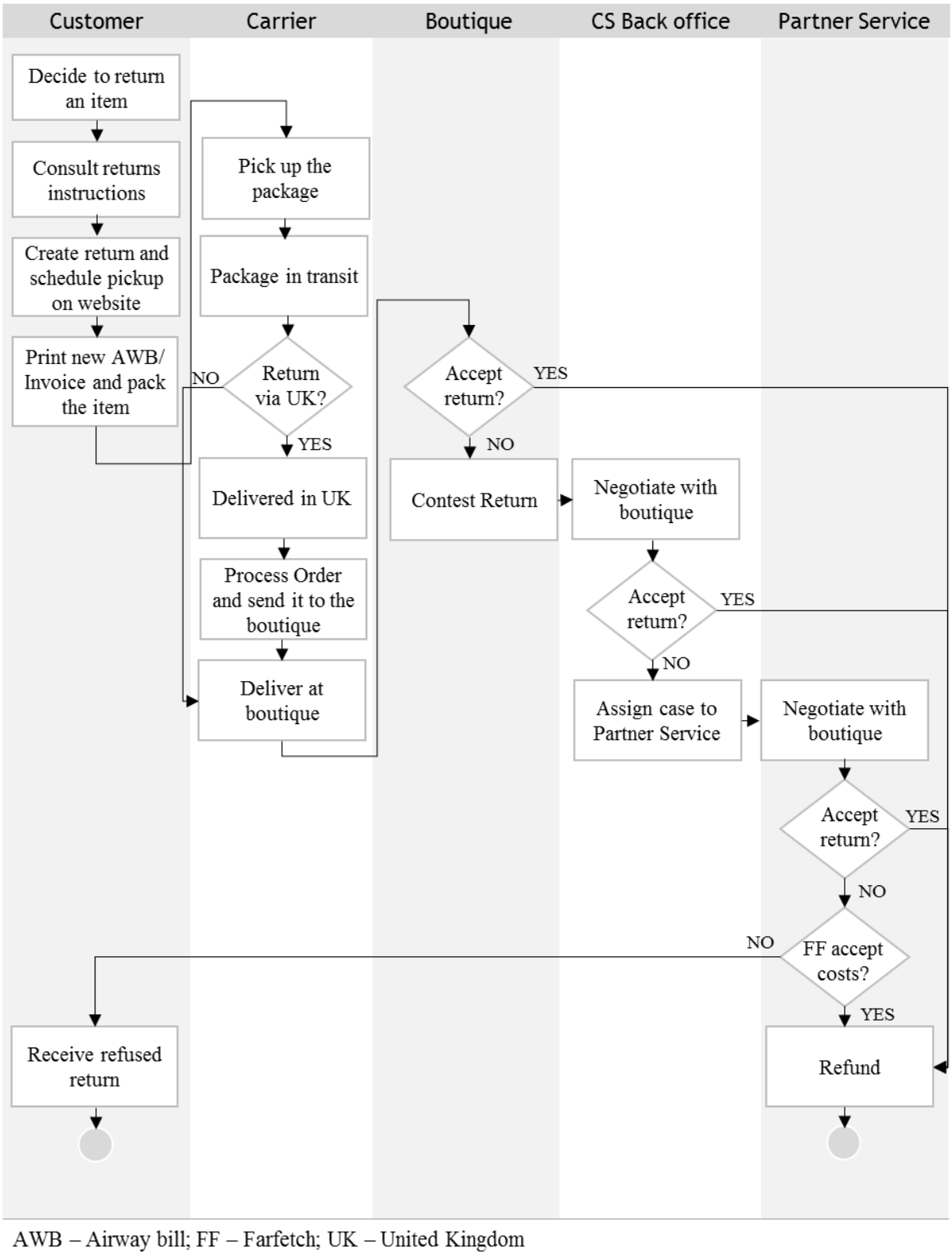

Figure 16 - Returns process swim lane

4.2 Contested Returns Improvement: Pre-Project

The process designed for managing returned orders was being manipulated by the boutiques. With the main purpose of providing an amazing experience for the client, Farfetch imposed that the contest must be created within two days after the order is delivered in store or the return would be auto-accepted regardless of the item condition. As consequence of inefficient processes in the boutiques that Farfetch cannot control, the boutiques find hard to meet the two days deadline and therefore they contest orders only to obtain some more time to inspect the items.

These contests in bulk drastically increased the Customer Service (CS) back office team workload that has to do the follow up on every contest. Consequently, one project manager whose natural team is Continuous Improvement and part of the Cross Functional Team, noticed this problem and submitted the problem to the operations potential business sponsor.

The indicator that justified a first analysis was the fact that 25% of interactions by the CS back office was due to contest returns and the agents reported that most of the contacts were false and the contest was immediately closed. The business sponsor asked for a deeper study on how the problem can be addressed and the current impact of this issue on the organization operations.

A small work team started studying the cause of the problems and the project potential, initiating with this the four step approach for managing projects. In order to have dedicated people to each task, two stakeholders with different functions integrated the team. One of the first steps was to fully understand how Farfetch internally handle a return and a contest and what are the possible variables.

Therefore, a Continuous Improvement specialist conducted this study close to different areas and mapped all the processes. Understanding the impact of the returned contests in the business and the internal work created was critical to assess project's potential. The responsible for this task was the project business analyst. Tasks assignment process did not use the RACI matrix tool due to the embryonic phase of the project. Nonetheless, each role was clearly defined before initiating the four step approach.

The project team worked in one week periods in which new data and information was delivered and studied. The main purpose in this stage was not to create a solution but trying to understand the potential and the causes for the overall problem.

The first meeting was conducted with all the project team members, tasks were assigned for the week with the goal of comprehending the contest process and the impact on the business.

Collected data from a 5-month period indicated that 19% of total sent orders in value was being returned from which 23% was being contested, therefore 4% of all sold items are being contested which represents a heavy impact on the business and internal workload.

Additionally, information collected close to customer service agents pointed that boutiques were mainly using one type of contest to gain time to process the returned orders. When examining a return, the boutique have multiple options to contest available on STORM:

- **Airway bill for exchange** – in that case of the boutique can exchange the returned piece for another size or item and the customer is willing to accept it, the boutiques request Farfetch a new documents to send the exchanging item to the client;
- **Brand box damaged** – while in transit, the box given by the item's brand for packaging can be damaged and so the value of the item decreases and sometimes cannot be resold;

- **Item to repair** – in cases when the item is damaged but a repair is possible, the boutique can contest in order to negotiate with Farfetch the costs allocation;
- **Late return** – If the return arrives at boutique 28 days after the customer received the order, Farfetch policy states that the return does not have to be accepted by the boutique;
- **No security tag** – In every order sent, each piece has a security tag attached and if it is broken, Farfetch policy states that the return does not have to be accepted by the boutique;
- **Not mine** – Farfetch business model allow customers to shop in the same order from different boutiques. Therefore, an order can have multiple items from multiple stores. If a customer wants to return one of those items, the item has to be selected and return airway bill and invoice printed. In this process the customer can swap the documentation or pick the wrong item to return and therefore the boutique will receive an item that is not from that store;
- **Return not arrived** – while in transit the order can get lost or the customer can create the return and the carrier may never pick it up. Since the boutique has visibility over the returns that were created, if the boutique realizes that the return is taking too long, a contest can be made to warn Farfetch;
- **Worn or damaged** – If the item was worn or damaged, the boutique can contest and after a negotiation process, the return can be accepted at Farfetch cost or boutique cost.

Information stored in Farfetch's database enabled the study of the real impact of each contest in the process. The analysis concluded that the two main contests used were "Late Return" and "Return not arrived", together representing 87% of all contests created in the five-month period in analysis. With this data, Table 1, one of the origins of the increased workload was detected and the project team started looking for the causes of these problems.

Table 1 - Number of orders per contest

Contest	Number of Contests
Return not arrived	12.682
Late return	2.065
Worn / damaged	678
Not mine	402
AWB for exchange	375
Box damaged	280
No security tag	242
Item to repair	98

The project manager successfully executed the analysis using a combination of multiple sources of information and he has used that to guide the project team for the next steps. The stakeholder responsible for understanding the internal procedures collected information from Customer Service's agents who indicated that in some cases the boutique was contesting the returned order before arriving at the boutique and even before the carrier picked up the package in the customers' address.

With the inputs collected in the first week, the project team continued a deeper study in order to understand the weight of the contests created before the arrival at the boutique and the reasons behind that.

Farfetch's database stores information with the time of each phase of the return process:

1. Return created by customer date;
2. Returned order picked up by carrier date;
3. Order delivery at Boutique date or Order arriving at the United Kingdom date;
4. Contest date;
5. Accepted return date.

Using the dates stored in the database, the project team concluded that 31.13% of contests were made before the package arriving at the store, c.f. Figure 17. Therefore, it became clear that boutiques were deliberately creating fake contests without the item examination.

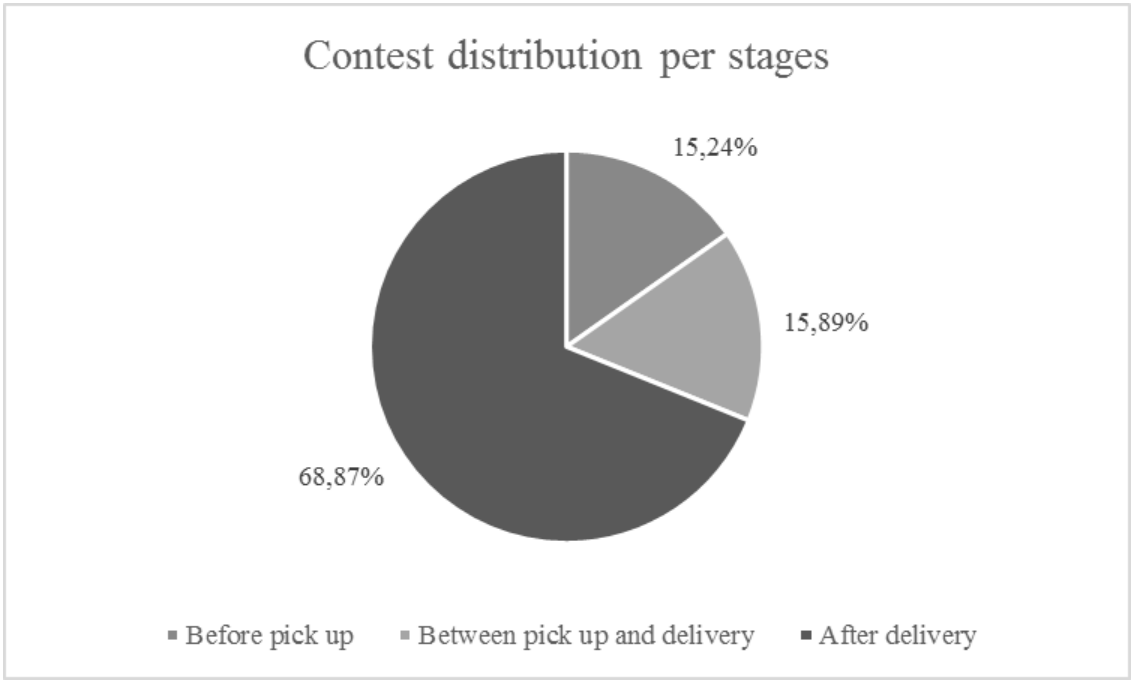

Figure 17 - Contest distribution per stages

With information from Partner Services advisors, that have a strong impact on the commercial side of the relationship with boutiques, the team concluded that boutiques were contesting to avoid auto-acceptance at the end of two days after the return arriving at the store. The problem detected was that the option to contest in STORM was available since the moment the return was created by the customer.

Boutiques understood this functionality and created internal procedures in which boutique's employees contested every day without taking into account the return status in order to not worry about the auto-accept time in the future. Additionally, the auto-acceptance time varied from orders that were shipped through the UK and orders sent directly to the boutique country.

In the case of orders sent via UK, Farfetch system was not receiving the second AWB information created by the carrier and therefore could not precise the moment in which the item arrives at the store. With no other possible solution, the system was designed to give the

boutique four days in those cases since, based on historical data, two days would be enough time for the package to arrive from the UK to a European country.

The lack of precision made boutiques uncertain about the amount of time to accept and so they start going around the rules in order to avoid extra costs to their business, since after the auto-accept the customer is refunded at boutique cost. However, at Farfetch side, the costs increased due to CS back office workload.

Table 2 analyses the workload created with this process. One can conclude that only 3% of the contests "Return not arrived" and "Late Return" is being accepted at Farfetch costs. Usually this occurs when the boutique creates a valid contest and therefore the cost is allocated to the business. The communication created due to the fake contests resulted in approximately 24 days of work for the Customer Service team, in a five month period, that could be avoided with a positive output from this project.

Table 2 - Contest tickets workload for CS back office

Category	Contested created during time in transit	Contests after arrival accepted	Ticket interaction time [s]	Total interaction time [work days]
Return not arrived	31%	67%	41,34	18,625
Late return	21%	76%	98,39	5,75
Item to repair	15%	43%	88,45	0,875
Worn / damaged	15%	43%	79,62	0,5
No security tag	24%	51%	81,99	0,5
Box damaged	22%	34%	104,36	0,375

Another study conducted tried to understand how the contested returns are affecting the customer experience and therefore the retention rate. The retention rate measures how many customers Farfetch is keeping in a certain period of time. For the same period of the previous year, a retention rate analysis compared type of contests and experiences with the retention rate.

A contest has a clear impact on the average time for refunding a client - Table 3. In the reasons usually used by the boutique for creating fake contests, especially in "Return not arrived", the values are the closest to the not contested returns. This is due to the fact that most of them are fake and therefore are quickly handled.

Table 3 - Time to refund per contest

Contest	Time to Refund [d]
No Contest	8,05
Return Not Arrived	**13,02**
AWB for exchange	14,34
Not Mine	15,93
Late Return	**16,00**
Item to Repair	18,31
Box Damaged	18,53
No Security Tag	18,55
Worn / Damaged	18,94

The impact of this increased resolution time affects the retention rate as show in Figure 18 - Retention rate per type of customer and type of contests. The analysis divided clients into two types: new and old customer. A customer that buys for the first time is less likely to buy again in the next year period, where a loyal customer is more easily retained.

However, the old customers are the ones where the contest has a biggest impact. With a 7,13pp difference between not contested group with "Late Return" and "Return not arrived" contests. New customer retention rate is also affected by 3,64pp. As expected, the other contests have a even lower retention rate.

This is due to the fact that this contests are real and therefore the process usually involves a back and forth communication between Farfetch's agents and the customer.

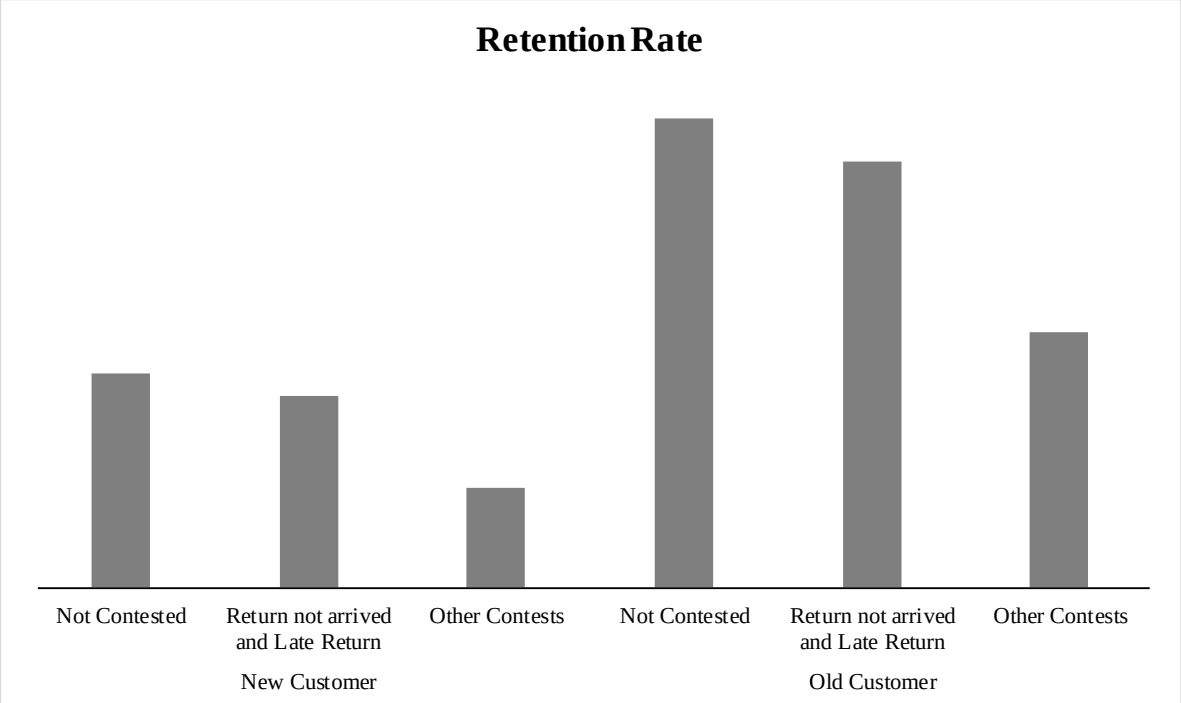

Figure 18 - Retention rate per type of customer and type of contests

This retention rate difference between both experiences represent sales lost by Farfetch since each client has a life time value associated, which represents the value that will be spent through the retention time. Additionally, acquiring a new customer is significantly more expensive that maintaining a customer. Therefore, a first bad experience eliminates all the money invested in acquiring and does not generate any value for the business.

In the end of the second week and with all the information collected, the team understood the main cause of the problem and how the project can affect the current state of the returns process. A solution was not yet designed, but at this stage, the project manager involved the Order Management PO since it was clear that the solution would need a technical development.

The Order Management team is part of the Partner Tools Services cluster within the Tech team. The PO that was consulted is responsible for managing the STORM and a preliminary technical assessment was conducted for this project. Consequently, the project gains a new dimension, becoming a cross functional project that is directly dependent of the Tech team development.

The project team consolidates all the information collected until that point and presents it to the business sponsor. The Project Vision template was extremely useful for this presentation since this guided the team to understand what they should deliver at this stage. With the

Project Vision submission and data presentation, the business sponsor supported the project and asked for a further analysis with a possible method to solve the problem - Annex E

In the third week, the project team discussed the possibilities for solving the problem. Using the assumption that the second AWB can be tracked, since another parallel project was being conducted to implement this feature, multiple ideas were created. As a result of the discussion, a preliminary solution, Figure 19, was developed that aimed to prevent boutiques to continue with this behavior.

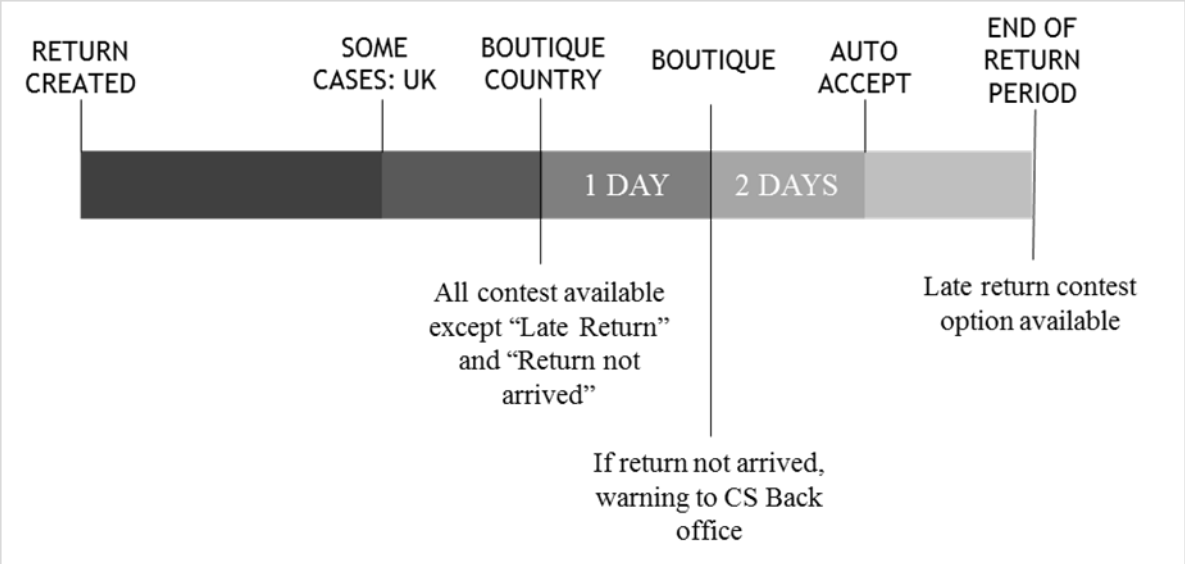

Figure 19 - Preliminary solution overview

The team focused on the most critical types of contests. In a first analysis, the team discussed the possibility of only allowing boutiques to contest when the return arrives at the boutique in detriment of the previous method where they could contest since the moment when the customers create the return. However, the carrier that Farfetch uses to outsource the transportation, has to upload the information that the order was delivered and in some cases this could take up to six hours to be completed, due to synchronization delay. Past six hours, the boutiques could already have accepted the return and the customer could have already been refunded. Therefore, this solution would create other problems and, actually, worsen the customer experience.

With the ability to completely track the location of each returned order, specifically for returns via UK, an intermediary solution was created. The carrier has many central points around each country or groups of countries where the orders go through. And the last point before delivery is the hub that supply the boutique country.

Furthermore, historical data indicated that when a return enters the boutique country, it takes less than 24 hours do be delivered in store. This information collected enabled the project team to solve the "Return not arrived" contest problem together with the second AWB information. The system would only allow boutiques to contest an order after the return enters the boutique's country. However, "Return not arrived" would not be available immediately since this contest is only used when the order is taking too long to arrive.

Therefore, after one day in boutique's country, if the order is not in the store the system automatically creates the warning to the CS back office team, instead of the boutique. Afterwards, the CS back office is responsible for following up on the problem and take corrective measures. The solution reduces fake contests and changes the paradigm to a proactive approach to the problem, where the contact is created by Farfetch's agents.

The other contest, "Late return", although in a smaller scale, was being used for creating fake contests. Similarly to the previous solution proposal, this problem could be simply solved by not allowing boutiques to use this reason to contest since the beginning of the return process. The system would only permit the contest for orders that has passed 28 days since the order was delivered to the customer, which is the time limit stated in Farfetch's policy.

A proactive approach was not implemented for this type of contest once boutiques can sometimes accept the order even if the return period has past. Therefore, an automatic notification without boutiques interference would result in unnecessary costs for Farfetch.

About the other contests, these should be available since the moment the returned order enters the boutique's country but, in order to contest, a photo has to be uploaded. This feature creates the act of contesting more difficult and, in case of upload of fake photos, Farfetch has evidences to support claims and impair the boutique.

At the end of the third week, the team could deliver a solid work with proposals and justification for every action and decision. Every analysis and developed work was documented and accessible online on the project SharePoint site. Finally, the business sponsor had to take a decision regarding the initiation of the project.

However, Tech teams' roadmap for 2016 quarters was already closed when this project appeared. Therefore, the execution of the project would require that another previous planned project was dropped off due to the lack of resources of the Order Management team for including more tasks. Since this exercise is a proof of concept, the cross functional committee was not yet stablished and the prioritization exercise had to be made by the business sponsor and the project team.

The decision was taken using a comparison with another project with the same business sponsor and project manager. Different stakeholders raised different points that were valuable but without a common understanding in which project should be implemented.

Nonetheless, the Project Scoreboard tool developed for prioritizing projects provided an objective vision over the pros and cons of each project. Using some of the information collected about the project in comparison, both Project Scoreboard were completed - Figure 20.

		Weight	**Project**	**Project X**
Costs	Capital Investment	7,5%	0	0
	Effort	10,0%	5	5
Benefits	GMV Uplift	20,0%	1	1
	Operational Costs Savings	7,5%	3	1
Business	Strategy Alignment	20,0%	1	1
	Competitive Advantage	10,0%	0	0
	Performance Improvement	5,0%	4	4
Customer	Customer Orientation	12,5%	2	5
	Boutique Orientation	7,5%	5	0
Score		100%	**1,95**	**1,8**

Figure 20 - Project comparison using project scoreboard

The score itself was not enough for making the decision, but all the discussion around each score segmented the project into different perspectives that everyone agreed to be important to consider. This exercise simplified an extremely hard task and a mutual agreement was found where both projects will be executed since the PO agreed to divide the team into two for each sprint and so both projects could be executed.

Subdividing each project into phases and the team is only possible when the PO knows the team and its capabilities. Since both projects were feasible and important to the organization – which can be verified due to very similar Project Scoreboard results – the Tech team accepted the roadmap changes.

Since the project is scheduled for the middle of the third quarter of 2016, the project advances to the project initiation where the solution is finalized and all the needs and requirements are completed and delivered to the Tech team.

4.3 Contested Returns Improvement: Project Initiation

A kick-off meeting was hold with the stakeholders from all the areas affected to notify them that the project was accepted and to define the tasks to be completed. Since that in the project pre-project phase a deep analysis was conducted and a partial solution was developed, this second stage had to guarantee that the solution created is viable and improve some of the ideas.

A project timeline is created and responsibilities were assigned using the RACI Matrix. The project is expected to start the execution stage in August 2016 and until then all the technical and business requirements must be gathered. Each responsibility was clearly defined and shared with everyone so that expectations could be aligned.

In this phase, it is very important to keep the leaders from each affected area aware of the course of the project and the possible outcomes. Many questions were raised in this kick-off meeting that had to be verified.

As a first exercise, the team conducted a risk identification session were all the risks were identified based on multiple outputs and assumptions. In the brainstorming session, the following risks were identified, Table 4.

Table 4 - Risks identificated

Risk	Origin	Risk Rating
The 2nd AWB upload information fails in UK	Carrier	42
Boutiques start uploading fake photos	Boutique	33
Boutiques use the contest "AWB for exchange"	Boutique	32
Order Management team can't integrate 2nd AWB in system on time	OM Team	30
Boutiques phone contacts increase for Partner Services	Boutique	24
Number of auto accepts increases due to boutiques' lack of efficiency	Boutique	24

The risk analysis template created for evaluation risk served as foundation for this risk analysis. After the risk identification, the team roughly estimated the impact and likelihood of each event for the project. Automatically, the project was classified as a medium risk project, Figure 21, with a total risk rating of 185. For each one of the risks a response plan was created and a responsible assigned.

The identification of the risks served also as an opportunity to improve the solution created. One of the risks identified was that the boutiques could start channeling the contests to another reason “AWB for exchange” that does not require the upload of a photo.

Therefore, the new solution included now a limitation of contests per type of contest. Previous contests numbers from the last year indicated that this contest was only used a maximum of five times in a month in one of the boutiques.

A limit of ten contests per month was established and in case of the boutique utilizes all the contests, the system notifies the Partner Services agents and the boutique is contacted and educated to change that behavior.

Other risks, like the second AWB information failure, does not depend on Farfetch structure and therefore can only be accepted and monitored throughout the project and roll out. If the errors increase over time, the carriers have to be contacted and the problem addressed.

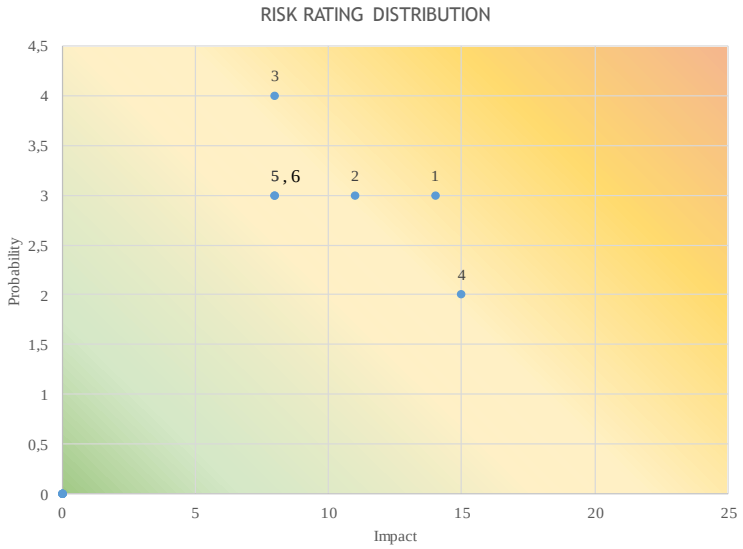

Figure 21 - Project risk distribution

The risks that are related to the workload augmentation have to be controlled after the project implementation. This identification was extremely helpful for defining the success and exit criteria. For this project, the success criteria defined were:

- 70% reduction of the number of contests
- Reduction to 10% of CS back office workload related to returns
- 1 pp increase of the average retention rate of customers with a returned order

The exit criteria defined that, if met, blocks the project:

- The 2nd AWB information upload fails at least 75% of the time

As a result of many meetings and work sessions with different parts, the team finalized the solution to the problem and identified the multiple criteria to evaluate the project course. This solution is delivered as needs to the product owner lead and after transformed into tech requirements.

As previously stated, some of the features were added in this phase as a result of the discussion with the stakeholders. In particular, the CS back office stated that it was very common to establish a back and forth communication with the boutique in some contests because they did not provide the complete information. Therefore, the reasons for this excessive communication were identified and the project identified that a simple checkbox would solve this problem and ease internal workload.

The main needs fed to the product owner lead were:

a. Track the 2nd AWB of orders via UK;
b. Change the auto-acceptance time for two days for all returns;
c. Identify when the returned orders enter the boutique's country;

d. Allow contest option only when the return enters the boutique's country;
e. Add time limitations and mandatory attachments for each contest type - Table 5;
f. Limit number of contests per boutique, country and period;
g. Adapt STORM interface.

Table 5 - Solution contest conditions

Contest	Condition
AWB for exchange	Available 28 after the order is delivered to customer
Box Damaged	Photo upload; Description text; Security tag and New brand box checkbox
Item to Repair	Photo upload
No security tag	Photo upload; New brand box checkbox
Not Mine	Month limit of 10 contests
Not Mine	Photo upload; Description text; Security tag and New brand box checkbox
Return Not Arrived	Eliminate and notify CS after one day in boutiques country
Worn / Damaged	Photo upload; Description text; Security tag and New brand box checkbox

The product owner lead used this information and delivered this to the Order Management team. Firstly, product owner lead verified the possible impact of the project execution in multiple teams. Subsequently, together with the Tech team, the needs were transformed into technical requirements and the technical solution was develop. The complexity associated with the solution conjugated with the team's roadmap defines the time and resources needed to fully develop.

During the prioritization exercise, the team compromised to deliver both projects in the same quarter. However, the needs handed out to the Order Management team were by itself a complete project. Thinking Agile, the project team defined the minimum viable product (MVP) for development.

The product owner lead indicated that the alteration in the STORM interface demanded a lot of work and depends on other teams, such as the User Interface team. As so, this need was delayed for future work, since the other needs represented the core value of the project and could not be implemented separately.

As a result of the requirements definition and estimated development time, the project could be financially evaluated since both aspects, costs and benefits, were estimated. The business analyst used the information gathered in the Pre-Project stage to estimate the benefits that were divided into two types: Operational Savings and GMV uplift.

The first is calculated based on the time that will be saved internally. Projected values over a three-year period, based on the expected company growth and return rate evolution, indicated that 434 working days could be saved - Figure 22. This time only considers the time that each contact is handled and therefore, the true value is probably larger than the estimated.

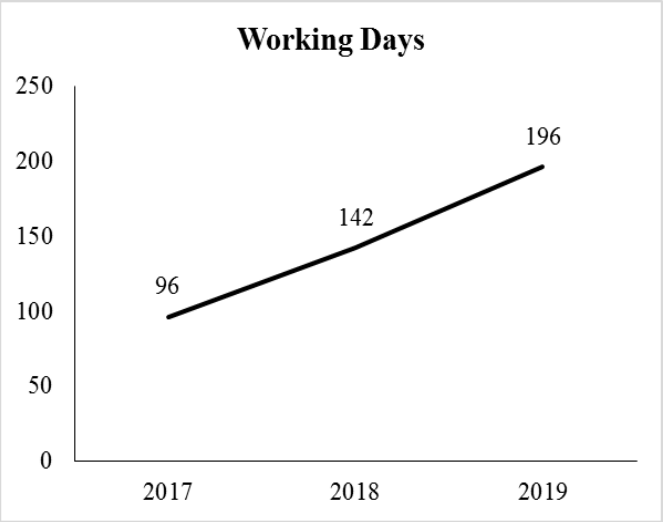

Figure 22 - Working days saved forecast

On the other hand, as demonstrated before, a contested return has an impact on the customer retention rate and subsequently Farfetch is losing customers due to a bad experience. Using the life time value of a new and old customer, project earnings were estimated knowing that the project would increase the retention rate by 7,13pp and 3,64pp, for old and new customers respectively, c.f. Figure 18 - Retention rate per type of customer and type of contests.

Regarding costs, only the development costs must be considered that is automatically calculated as demonstrated in the 3.5.2 Project Initiation. The financial analysis considered three scenarios that were created by the stakeholders. In every scenario, the project was viable and the financial metrics calculated indicated that the project was suitable for the business.

With the completed business case, the next stage was to build a dashboard for controlling the project results. This is extremely important for the results monitoring and outputs evaluations. The dashboard was developed using Tableau Server software and will be used as a reporting tool after project execution.

This dashboard focus on the Customer Service workload related to contest returns and Partner Services as well. The dashboard displays the information of each week number of contests; contests reasons; and return resolution time.

A new metric was created to control boutique performance. This metric measures the percentage of contests over total returned orders received. Hence, the boutiques are clearly monitored and the ones that try to go around the new method can be warned and educated.

Finalizing this stage, another meeting is conducted where the project is finally presented to the business sponsor with the complete business case for a final evaluation. The promising results of the financial analysis allied with a substantial performance improvement and an enhanced customer experience served as a final validation and the project advances for the next phase where the Tech team will implement the technical solution, in the next quarter. In the next steps, the framework will serve as a foundation for the project management practices.

After all these tasks, meetings and discussions, the project was justified and solved with a methodic approach. All the stakeholders felt involved and were part of the solution and informed of the project status during the project course. Each project has its own characteristics and must be managed in different ways, however, the framework consolidated the approach and guided the team throughout the project design, creation and initiation.

5 Conclusions and Future Work

The constant change and mutation of the luxury e-commerce demands for continuous improvement efforts, providing new products and services that aim to increase the customer satisfaction and retention, combined with overall business efficiency. For Farfetch, these needs result in a vast number of projects that in the past year became hard to efficiently prioritize and manage.

5.1 Conclusions

The present project implemented a solution for this problem by developing a new project management framework. The four step approach created a foundation for managing products while, at the same time, providing a systematic method to prioritize projects.

The creation of a dedicated team for managing cross functional projects was one of the outcomes of this project. This allowed to clarify roles and responsibilities across the organization and to have identified and specialized people to each functional area projects.

Furthermore, the cross functional committee fortifies the revamped project orientated mindset and increases visibility over the project portfolio of Farfetch. This new organization has a clear focus on assuring that the right projects for the organization are being executed by empowering the decision process to defined individuals with a more senior and strategic vision.

Combining the software development framework, Scrum, with traditional project management was one of the challenges since the Agile culture was not established across every functional area. The designed approach is flexible since stages can many times overlap without the conclusion of the previous ones. Needs and requirements may change throughout the project and the framework answers to this by providing a set of flexible guidelines in detriment of rigid rules.

Alongside with these changes and iterations, the framework gives emphasis to the communication and alignment among stakeholders. Events such as kick-off meetings and close-out, together with the communication plan assure that everyone is informed in time and is aware of important milestones.

Furthermore, documentation procedures, standardized deliverables and certain activities did not follow the fast pace of Farfetch and its projects. As a response to that, this project contemplates, for each step of the approach, several actions that have to be considered, as a result of the project managers past experience and project management best practices. Some of the activities, such as risk analysis, are now considered which can lead to benefits in a short term.

Once again, the deliverables, as the four step approach, are flexible since not all the deliverables and actions are mandatory for every project. Each project has its own characteristics and should be addressed on its own. In some cases, adding documentation and procedures would only result in unnecessary work without adding value.

Although the development of the framework involved a deep study over project management and business needs, it was necessary to test in a real scenario the applicability of the model. The Contested Returns improvement project served as proof of concept, where the team followed the framework and, at the same time, solved an existing problem. The final result, although incomplete due to Tech team's roadmap restrictions, is very positive.

During the project, the team used both the four step approach, taking advantage of the prioritization exercise in a real scenario with another project, and used deliverables and tools to efficiently communicate and manage the project. The project team felt involved and all the stakeholders were kept informed as a result of the standardized documentation available to everyone, through the communication plan and several meetings.

In some cases, such as the pre-project stage, the team took the analysis a little further than expected. Therefore, due to the project size, it is normal that a considerable part of the solution and analysis was developed at this point. This underlines the framework flexibility to different project needs, size and complexity.

Integrating Operations and Tech functional areas was facilitated due to the responsibilities assignment and the support provided by the documentation procedures. In fact, these activities served as a facilitator and created a logical sequence of events for stakeholders to follow and did not deviated attention from the project. Nonetheless, the execution phase has not started yet and some conclusions cannot be drawn. This next stage is critical since it is where the solution is implemented. The project team has still to communicate and many challenges will arise during this time. Until then, project risks are being monitored as well as boutiques' behavior through the project control dashboard. At this moment, all the project variables are considered and being controlled.

5.2 Future Work

This new project management framework must not be static. Project needs change and so do project management needs. In this next stage of establishing the framework, further studies must be conducted using other pilot projects and, with the collected inputs, continue the constant iteration of the framework. Due to the fact the proof of concept remaining phases are still to be initiated, the project team must continue following the framework steps in order to validate the benefits, assess challenges and possible improvements.

Project managers, product owner leads and other main stakeholders must be aware and engaged with the new model. Firstly, the committee has to be completely established and operational. However, during the proof of concept this was not verified and the business sponsor and project manager had to execute these functions. Further tests to the prioritization exercise must be conducted in order to optimize the process. Additionally, the project scoreboard tool has to be revaluated when business strategy changes.

The paradigm change of project management can cause some agitation and confusion which can lead multiple different approaches for project management inside of the same company. In order to avoid this, training sessions and workshops must be conducted in the future, before all the organization accepts this as the new framework.

One of the identified needs during the proof of concept was the necessity to have a web platform for keeping all the documentation, instead of the currently used internal server. There is an ongoing study for the most suitable provider of this platform. In the future, all the communication will be channeled through this software. With this, all the stakeholders will have full visibility over projects, accessible anywhere in the world. Additionally, when all the main agents of project management are instructed, it is important to measure project management performance through key performance indicators that evaluate time to develop, number of hours per task and overall efficiency.

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ANNEX A: Project Vision Template

<Project Name>- Project Vision Template

Project Context and Objectives

Current Context
Detail Project Context and Main Objectives

Challenges/Need Identified

Primary Objectives

Main Requirements Identified

Requirements
- Identify main requirements. They can be functional or non functional requirements

Business/Technical Areas Impacted

Business

Technical

Main Risks, Assumptions and Dependencies

Main Risks Identified
- Top 3 Risks

Main Assumptions Identified
- Top 3 Assumptions

Main Dependencies Identified
- Dependencies identified

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ANNEX B: Project Scoreboard Ranking Matrix

		0	1	2	3	4	5
COSTS	Capital Investment		>800,000 £	600,000-800,000 £	400,000-600,000 £	200,000-400,000 £	0-200,000 £
	Effort		More than 6 teams involved or >12 months duration	3-5 teams involved and 9-12 months duration	3-5 teams involved and 3-6 month duratin	< 3 teams involved and 3-6 months duration	< 3 teams involved or < 3 months duration
BENEFITS	GMV Uplift	0,0%	0%-1%	1%-2%	2%-3%	3%-4%	> 4 %
	Operational Costs savings	0,0%	0%-1%	1%-2%	2%-3%	3%-4%	> 4 %
BUSINESS	Strategy alignment	0 Strategic Pillars	1-2 Strategic Pillars	3 Strategic Pillars	4 Strategic Pillars	5 Strategic Pillars	All Strategic Pillars
	Competitive advantage	No competitive advantage	Competitive edge over 0-20% of competitors	Competitive edge over 20-40% of competitors	Competitive edge over 40-60% of competitors	Competitive edge over 60-80% of competitors	Disruptive project
	Performance improvement	0 KPIs affected	1 team KPI impact	2 team KPI impact	3 team KPI Impact	3-5 team KPI Impact or 1 business KPI	> 5 team KPI Impact or 2 business KPI
CUSTOMER	Customer orientation	Not customer oriented	0-20% customers affected	20-40% customers affected	40-60% customers affected	60-80% customers affected	80-100% customers affected
	Boutique orientation	Not boutique oriented	0-20% boutiques affected	20-40% boutiques affected	40-60% boutiques affected	60-80% boutiques affected	80-100% boutiques affected

ANNEX C: Financial Analysis Template

BENEFITS ANALYSIS	2017	2018	2019
GTV	-	-	-
Operational savings	-	-	-
Benefit 1	-	-	-
Benefit 2	-	-	-
TOTAL	-	-	-

PROJECT	Project Name
KICK-OFF YEAR	2016
WACC	0%

COSTS ANALYSIS		2016	2017	2018	2019
Project Costs					
	Implementation	-	-	-	-
	Contracts	-	-	-	-
	Other resources	-	-	-	-
New Operational Expenses					
	Developers	-	-	-	-
	Contracts	-	-	-	-
	Other resources	-	-	-	-
TOTAL		-	-	-	-

FINANCIAL METRICS	
Return on Investment	0%
Net Present value	- €
Payback Period	0,00
Internal Rate of Return	0%
Benefit/Cost Ratio	0,00

IMPLEMENTATION COST CALCULATION

Teams involved	nr of Sprints	Sprint duration [w]	Team size	% dedicated time	Work Hours
Team 1	0	0	0	0%	0
Team 2	0	0	0	0%	0
Team 3	0	0	0	0%	0
Team 4	0	0	0	0%	0

€/h	0,00 €

Total work h	0

3-POINT ESTIMATION	NPV	ROI
Best case estimate	-	0%
Most likely estimate	-	0%
Worst case estimate	-	0%
Weighted average	-	0%
Uncertainty	-	0%

ANNEX D: Risk Analysis Template

PROJECT NAME	NUMBER OF RISKS	6	RISK RATING	0

	RISK DESCRIPTION		IMPACT										
RANK	RISK	ORIGIN	SCOPE	SCHEDULE	COSTS	BENEFITS	PROBABILITY	IMPACT RATING	PROBABILITY RATING	RISK RATING	RESPONSE	OWNER	ACTION
1	Risk 1		None	None	None	None	None	0	0	0	-		
1	Risk 2		None	None	None	None	None	0	0	0	-		
1	Risk 3		None	None	None	None	None	0	0	0	-		
1	Risk 4		None	None	None	None	None	0	0	0	-		
1	Risk 5		None	None	None	None	None	0	0	0	-		
1	Risk 6		None	None	None	Medium	None	3	0	0	-		

ANNEX E: Contested Returns Project Vision

Contested Returns - Project Vision Template

Project Context and Objectives

Current Context
Boutiques are contesting in bulk for no reason to gain more time for inspecting the returns and avoid auto-acceptance

Challenges/Need Identified
Create a solution that eliminates the migration of contests to other reasons

Primary Objectives
Reduce CS Back Office workload
Stop contests in bulk
Improve STORM information provided to boutique

Main Requirements Identified

Requirements
- Ability to track the 2nd Airway Bill
- Auto accept time must be two hours for all returns
- Contest option can't be available since the return creation by customer
- Contest permission must be changed on STORM

Business/Technical Areas Impacted

Business
CS back office
Partner Services

Technical
Order Management team

Main Risks, Assumptions and Dependencies

Main Risks Identified
- The 2nd AWB information is not trust worthy
- Boutiques will find another method
- Boutiques and Farfetch relationship can be damaged

Main Assumptions Identified
- The 2nd AWB information can be tracked
- The solution created will prevent contests in bulk to happen again

Main Dependencies Identified
- OM team roadmap

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