Framework for the strategic portfolio selection of e-commerce features

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Abstract

The standardization and consolidation of processes is essential to leverage the growth of a company in a sustainable way. The company where this project was developed, Farfetch, has grown very sharply in recent years, following the growth trend of the e-commerce sector. The existence of processes and coherent information flows is essential for structured and optimized decisions to ensure that Farfetch continues this growth path.

A more recent business unit of the company creates online commerce solutions for luxury fashion brands, using the main technological capabilities available as a digital platform. Since it is a service available to brands, often the shopping experience that brands want to provide cannot be fully satisfied with the services available. As a consequence, requests for new features are recurrently made, justifying the purpose of this project for the creation of a framework that structures the evaluation process of these new requests.

Initially, the main problems with the approach used were mapped, showing the changes that would be necessary. This way, three sequential stages were created for a better and smoother implementation: Growth, Stabilization and Innovation. A framework was developed with the aim of analyzing the strategic relevance, framing in the business and financial metrics of any new service that could be requested. For this, the tool is based on the innovation process using the *Stage-Gate*[®] model and on the creation of a financial assessment tool of the expected impact. Because most of the assessment is qualitative, it was necessary to adopt a model based on scores that facilitated the comparison, being used a process of analytical hierarchy for the assessment of the relative weights to be used.

The framework was structured with four successive moments of evaluation of increasing complexity, thus ensuring agility in the evaluation. All the necessary inputs for the framework were collect and compile. These include information regarding trends, competitors and the company's strategic vision.

As a way to test the performance of the framework, it was applied to two specific features. One of them, the already existing pre-orders of articles was used to adjust the various parameters. It was concluded that the choice made in the past was the most correct one that would allow to improve the percentage contribution per sale and margin health. The other, non-free returns, is currently under review. Using the assessment framework, it was concluded that there is no strategic relevance since the decrease in the returns cost is surpassed by the exacerbated decrease in the value of sales.

The tool developed in the scope of this project brought visibility of all the necessary framework and homogenization in the evaluation process. In this way, only requests that are effectively framed and justified will become projects, allowing the company to better use its resources on what is its long-term strategic vision. ii

Resumo

A uniformização e consolidação de processos é essencial para alavancar o crescimento de uma empresa de uma forma sustentável. A empresa onde este projeto foi desenvolvimento, a Farfetch, cresceu de forma muito acentuada nos últimos anos, acompanhando a tendência de crescimento do setor de *e-commerce*. A existência de processos metódicos e fluxos de informação coerentes é de elevada importância para que decisões estruturadas assegurem a continuação deste crescimento.

Uma unidade de negócio mais recente da empresa cria soluções de comércio *online* para marcas de moda de luxo, utilizando as principais capacidades tecnológicas disponíveis enquanto plataforma digital. Uma vez que se trata de um serviço disponibilizado a marcas, muitas vezes a experiência de compra que estas querem proporcionar não consegue ser totalmente satisfeita com os serviços disponíveis. Com isto, pedidos de novas funcionalidades são recorrentemente feitos, justificando o objectivo deste projecto para a criação de uma *framework* que estruture a avaliação destes novos pedidos.

Inicialmente, os principais problemas com a abordagem utilizada foram mapeados, evidenciando as alterações que seriam necessárias. Deste modo, criaram-se três etapas sequenciais para uma melhor implementação. A *framework* foi desenvolvida com o objetivo de analisar a relevância estratégica, enquadramento no negócio e métricas financeiras de qualquer novo serviço que pudesse ser pedido. Para isto, a ferramenta tem por base o processo de inovação utilizando o modelo *Stage-Gate*[®] e a criação de uma ferramenta de avaliação financeira do impacto esperado. Pelo facto de grande parte da avaliação ser qualitativa foi necessário adotar um modelo baseado em pontuação que facilitasse a comparação, sendo utilizado um processo de hierarquia analítica para definição de ponderadores.

A *framework* foi estruturada com quatro momentos sucessivos de avaliação de complexidade crescente salvaguardando-se, desta forma, a agilidade na avaliação. Toda a informação necessários para a *framework* foi recolhida e compilada. Incluídos estão relatórios sobre tendências, concorrentes e a visão estratégica da empresa.

Uma vez que não se trata de uma ferramenta estática, foi também necessário recolher e compilar informação atualizada relativa a tendências, competidores e à visão estratégica da empresa.

Como forma a testar o desempenho da *framework* procedeu-se à sua aplicação a duas funcionalidades concretas. Uma delas, a já existente pré-compra de artigos, foi utilizada como forma a ajustar os diversos parâmetros. Concluiu-se que a escolha feita no passado foi a mais acertada dado que permitiria melhorar a contribuição percentual por venda e saúde da margem. A outra, devoluções não gratuitas, encontra-se atualmente ainda em análise. Utilizando a ferramenta de avaliação concluiu-se que não existe relevância estratégica e que a diminuição do valor de devoluções é ultrapassado pela exacerbada diminuição do valor de vendas.

A ferramenta desenvolvida no âmbito deste projeto trouxe visibilidade de todo o enquadramento necessário e homogeneização no processo de avaliação. Deste modo, apenas pedidos efetivamente enquadrados e justificados se tornarão projetos, permitindo à empresa orientar os seus recurso naquilo que é a sua visão estratégica a longo prazo. iv

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"Today is the Tomorrow you worried about Yesterday"

Dale Carnegie

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Acronyms and Symbols

AHP	Analytic Hierarchical Process
ANP	Analytic Network Process
AOV	Average order Value
B2B	Business to Business
B2C	Business to Consumer
ECV	Expected Commercial Value
FPS	Farfetch Platform Solutions
GMV	Gross Merchandise Value
GTV	Gross Transaction Value
IT	Information Technology
KPI	Key Performance Indicator
NPD	New Development Process
NPV	Net Presence Value
PMBOK	Project Management Body of Knowledge
R&D	Research and Development
SG&A	Selling, General and Administrative Expense
SLA	Service Level Agreement
WBS	Work Breakdown Structure
3PL	Third Party Logistics

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Chapter 1

Introduction

Over the last couple of decades, a digital revolution has been taking place, changing a transversal array of areas. The world of fashion was not excluded, neither fast-fashion retail nor luxury apparel. The adoption of both e-commerce and omnichannel business models created a fast paced change, forcing players to embrace this change if they want to remain relevant.

The internet as a platform for commercial transactions was not always perceived the way it currently is. The customer's perception was initially that online shopping was a discount channel where counterfeit products were abundant, leaving luxury brands reluctant to engage through this channel. The presentation and availability of the products in an online environment guarantees access to consumers who shop online because of time restrictions and personal shopping preferences (Pruzhansky, 2014). Most brands acknowledged that it was a huge market opportunity to be lost. As internet was becoming the main search and purchase environment for many consumers, including the wealthy, brands slowly started adjusting.

As of today, online engagement became one of the most used advertisement tools for luxury brands. With 75% of all luxury sales influenced by digital and with an online market evaluation that could grow up from \in 14 billion in 2015 to \in 70 billion by 2025, luxury brands are highly pressured to grasp digital commerce (Remy et al., 2015). The internet is the perfect environment for luxury brands to create a sense of desirability for content that is engaging for both existing and potential customers. However, these brands remain exclusive in terms of sales of the actual product. Subsequently, luxury brands use this new channel to spread their identity to new consumers while keeping a sense of exclusivity by offering selective online content and services to the brand's traditional customers (Nadine et al., 2012).

Despite the opportunities to increase sales through the online channel, many brands don't want to drain resources and effort from their core tasks. In fact, they prefer to focus on design, production and advertising and prefer outsourcing daily operations such as e-commerce. In order to accommodate the development of these brands' online identity, there has been in recent years the proliferation of third-party e-commerce agencies. These are entitled to ensure the creation and management of websites as well as operations and delivery until the final customer (Aiolfi and Sabbadin, 2019).

However, the capabilities these third-party companies have available may not be enough given the experience brands want to provide to their own clients. As a consequence, brands request particular features, catered to their needs. However, a third-party provider cannot cope with all the new feature requests, specially when capacity-wise it is impossible to fulfill them all. Ultimately, it becomes fundamental to address, evaluate and prioritize the development of those features. As the decision process can be highly subjective, a common process of evaluation applicable to every request the same way should be used. A framework for evaluation of those requests empowers companies on better decision-making whilst ensuring available capacity for internal strategic features.

1.1 Farfetch

Not all luxury players have the know-how and the financial capabilities to build an online retail system of their own. As a market gap that needed to be addressed, Farfetch was created in 2008 as a global luxury fashion e-commerce that originally intended to link consumers with brands and boutiques around the world, providing a curated catalog of luxury items.

The core service Farfetch provides stands out from the other competitors because it is commission based and constructed around a win-win partnership with boutiques. Being a marketplace means that when the end customer is buying a product at Farfetch, he is purchasing the item from a partner brand or boutique and has it shipped directly to him. Currently the company facilitates marketplace transactions between 1200 partners and clients in more than 190 countries.

One more channel through which to sell items is a captivate value proposition that many brands and boutiques decide to enroll with, given no commission is applied if no sales occur. This distinguishes the company from other luxury fashion online retailers, putting it in a standalone position since it does not hold any stock. There is less capital required and less risk of unsold items at the end of their respective season.

Headquartered in London, England, the company started expanding its offices as the scale of the operations increased, currently having offices in 13 different cities around the world. An Initial Public Offering (IPO) was done at the New York Stock Exchange in October of 2018. This was a point of shifting for the company that started diversifying its array of capabilities and clients. To fuel the company's diversification, Farfetch made a number of acquisitions of world renowned fashion players such as Stadium Goods, JD.com's luxury platform Toplife, New Guards Group (fashion conglomerate) and partnered with players such as Harrods (to create and manage the department's e-commerce platform) or Chanel to deploy augmented reality systems in the brand's own boutiques.

1.2 Farfetch Platform Operations

As part of the business model diversification, Farfetch started offering standalone services, originally intended only for the marketplace website, to clients that want to host their e-commerce under the same platform. These services are offered under the branding FPS - Farfetch Platform Solutions. It provides white-label omnichannel solutions for brands, exploring Farfetch's services and core systems on a pure Business to business service. Besides website design and creation, also facilitates integration with the same operations' capabilities that serve the marketplace website.

On a joint effort between FPS and the brand, the type of service the latter aims to provide are defined. These can be serviced in a modular way, meaning that if a client opts for only a particular set of services, the remaining ones can be integrated in the platform and kept under the brand's responsibility. The operations' catalog of services available to the client ranges from customer service (service hours and languages), different payment methods availability, shipping (destinations and delivery methods) to packaging. The Platform Operations team is transversal within the operations field, responsible to engage the multiple areas needed when specific FPS projects require them. The different teams of the department are organized as presented in Figure 1.1.



Figure 1.1: Farfetch Operations department structure

While the agreement with the brand is being discussed, it is necessary to understand the client's requirements to estimate if some developments are needed on the platform (new features) and the necessary time to execute and implement that request. Not all requests can be fulfilled as resources are limited and, usually, there are tight deadline for project delivery. Platform Operations has the need to evaluate and prioritize these requests while aligning with the fellow teams the different strategic plans and own initiatives.

It is also essential to test the website and the internal tools, as well as to help the brand with the operation set-up. After the launch of the e-commerce website, full support is given and best practices are shared with the brand in order to improve performance. Reportings are still performed to measure how well the partnership is doing even after the project is handed over. This is the step where the project manager starts closing the project's tasks and progressively shifts the communication channel to the teams that will take it on forward in time, such as the client managers.

1.3 Current problem and project scope

As the number of clients that wanted Farfetch's operational and technology knowledge to support their online presence increased, so did the complexity of the platform where all those projects are developed.

Initially, there were a number of features desired by clients that the company still had no offering to cope with. Therefore, once a client requested a certain service or feature, the teams did their best to develop it and add it to the platform capabilities in order to accommodate more brands in the future that would probably demand the same features. As the catalog of available service got increasingly big, the platform capabilities available to clients is now capable of meeting the majority of their needs. However, some new clients due to their importance, size or complexity, ask for the development of specific solutions for issues they feel are still not addressed. Not all requests can be address as it would be unsustainable to keep the development pace in order to execute each and every feature.

It is now important to evaluate if those solutions should be designed, developed and implemented considering how much they would cost and the effort they would need, against the outcome they will bring. The above mentioned issue justifies the urge to correctly evaluate the new features requested and assess if these should be developed or not given both external criteria (market trends and competition's offering) and internal (strategic and financial). This exercise of evaluation allows the prioritization of features given not only the importance they have to the original requester but also the impact on the company.

1.4 Project goals

Given the reason stated for the problem, the main purpose of this project is to create a framework for the evaluation of new requested features under the Platform Operations team's scope of action. To do so, the following goals were established:

- Modeling an information flow through out the organization to optimize all teams' view on which stage of the evaluation process those request are currently at.
- Design the framework and select the criteria to be used in the evaluation of new features requests, whose result is an output for other teams about the relevance of each feature for operations.

- · Collect and critically review all the needed inputs for the framework
- Utilization of the framework on a feature request already established to understand if the decision to move forward would make sense given the current approach.
- Use of the framework to currently assess a specific feature request under debate on whether or not to go on with the development.

1.5 Methodology

In order to create a valid framework that answers the company's needs, it was important to initially define which were the main distress points of the different stakeholders and conclude the underlying organizational needs.

Therefore, stakeholders from different teams and different functional areas were initially interview. All were directly involved with the development of new features, allowing a better assessment on how evaluation was done until that time. Those insights were used to address what the main issues were and how a new framework could tackle them.

After achieving a general mapping of behaviours within the different areas, two different approaches were defined. One is a high level plan that sequentially defines key actions and outputs on a broader time period. The other, a more detailed one, showcases the implementation plan for a shorter term solution, which includes the framework.

The framework development had the objective of smoothing the evaluation of new feature requests by clients, as well as homogenize the process and reduce subjectivity. In order to create it, a hierarchical process was used. By understanding what were the main objectives of the evaluation, it was possible to underline the key strategic points that better measured the relevance of the feature. As so, different sets of criteria, easier to measure, were structured for each strategic point. The Analytic Hierarchy Process was used to define the weight each criteria would have on the overall measure of strategic fit. A project management approach, particularly used in innovation related projects know as Stage-Gate[®], was used to even out the evaluation process on multiple sequential phases.

Ultimately, all the necessary inputs for the framework (both internal and external to the company) were collected. These include trend insights, competitors' mapping and market trends. The framework was put to use on an iterative process of improvement. An exercise was conducted by using the new evaluation model in a real project so that needs and improvement opportunities could be detected and implemented.

1.6 Thesis Outline

This dissertation is organised in five chapters that will be outlined as follows:

Chapter 1: Introduction of the present work, which includes a presentation of the company, the idiosyncrasies of the team where it was conducted, its business model and its environment. A

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brief description of the project that will be developed, its scope, motivation and objectives. Finally a short presentation of the structure that will be followed.

Chapter 2 - Theoretical background to scientifically support the decisions and assumptions made during the thesis. This chapter will be divided into four different subjects: luxury and e-commerce, technological platforms, portfolio management and best practises on project evaluation within portfolio management. Luxury will cover what is different from a traditional retailer to a luxury one as well as its conjunction with e-commerce; in terms of technological platforms it will be presented how these platforms work and the business model built around them; the portfolio management section will briefly describe the importance of project aggregation in order to balance resource availability; finally some evaluation techniques will be address in order to gather the best practises in project evaluation.

Chapter 3 - Description of the information flow through the stakeholders starting at the moment a new feature request is submitted. A critical analysis is presented on the communication structure that currently exists as well as the presentation of an internal communication solution.

Chapter 4 - In depth analysis of the framework developed as well as the review of all the criteria used to support it, the framework's life cycle as well as the inputs needed for the process to elapse as expected.

Chapter 5 - Final results to give an overview of the adaptation and usage of the framework in a real scenario, for two different features. One being a feature developed in the past where no evaluation was performed: pre-orders. The other one is a feature currently under assessment: non free returns. This chapter follows the gathering of internal and external factors as an input to the framework for evaluation.

Chapter 6 - Conclusion of the current thesis summarising the main improvements achieved based on the use of the framework and the opportunities that follow to be address in the future.

Chapter 2

Literature Review

2.1 **Business Environment**

The following chapter contextualizes the most important topics that will be approached during the project and will be divided in four distinct parts. The first gives a general overview of the company's customers with a description of luxury and its e-commerce peculiarities. The second, contextualizes the company's capabilities as an e-commerce service platform provider to other business. The third describes the portfolio management approach as well as the need to make strategically fitting. Lastly, the main methodologies for project evaluation to be applied throughout this project are presented

2.1.1 Luxury

There isn't a single and consensual definition of "luxury". The term itself is abstract as what may be perceived as luxurious is heavily dependent on the subject who is making the judgment. The concept of luxury is not socially consistent given that it is society who defines what luxury is (Kapferer and Bastien, 2009).

However, historically, it has been commonly associate with the assumptions of quality, social status, exclusivity, heritage and authenticity (Heine, 2010). Those intrinsic values can be traced back to the ancient cultures of Greece and Egypt, where royalty used ostentatious items as a way to demonstrate their financial superiority to the lesser privileged (Okonkwo, 2009). Nonetheless, the craving for these items was a powerful driver of artistic and technical discoveries that gradually spread throughout society and eventually benefited everyone (Kapferer and Bastien, 2009).

Numerous authors tried to formalize a way to accurately define luxury. Vigneron and Johnson (2004), for example, defined five key dimensions to assess it: conspicuousness, uniqueness, quality, extended self and hedonism. The first three comprise attributes to the object itself making it more appealing aesthetically and consequently more expensive. The latter ones, related with personal feelings and indulgence, create a desirability for the products that transcend the nominal value they have. The social, individual and material value that luxury items generate for consumers are all important in determining their attractiveness. These goods are regarded as expensive and rare with strong positive income elasticity of demand. An increase in income causes a larger increase in the demand of luxury items (Deaton and Muellbauer, 1980).

Currently there has been a paradigm shift on luxury retail. Due to the increase in the global economic power, the accelerated demand for luxury goods, initiated the named era of the "luxury democratization" (Okonkwo, 2007). Western countries have exhibited steady growth in their purchase of luxury goods over time. Emerging countries, such as Brazil, Russia, India and China (known as the BRIC) have been the fastest growing markets as more population is lifted from poverty to middle class. What might have been described as superfluous consumption in the past has become a symbol of economic uprising (Cayla and Eckhardt, 2008). Consequently, luxury brands try to retain the exclusivity dimension of their products even thought the use of mass marketing strategies (Okonkwo, 2009). E-commerce becomes increasingly alluring given the reach these brands now have to customers spread worldwide.

2.1.2 Luxury E-commerce and Omnichannel

Okonkwo (2007) states that the internet presents luxury brands the possibility to attain a global level of brand awareness within a short period of time. Luxury consumers gain empowerment to choose among a wider range of items, with easier purchasing processes and lower switching costs.

In fact, the development of the internet in a service dominant perspective has allowed luxury brands to create greater value for the customer, namely by offering different services alongside different channels. One of those services is precisely e-commerce that can be suggested as an alternative or complement to traditional retail. The shopping experience is experienced without interruption regardless of the type of channel. These channels, sales and marketing on a single entity (Herhausen et al., 2015). Cross-promotion and cross-selling is another powerful instrument of marketing (Pentina and Hasty, 2009).

Another complementary possibility unveiled with e-commerce is, for many brands, the option to go omnichannel. The client has not abandoned physical stores, they just make their own decisions, moving between online and offline. The customer journey is no longer linear and this approach requires operational changes, specially on the supply chain which inherently requires high investment costs. There is the need for investments in technology and the involvement of qualified people for the re-engineering of the outdated business processes (Frazer and Stiehler, 2014). As many brands are unwilling to make that type of commitment on building an e-commerce channel by their own, the fashion sector has seen in recent years the proliferation of e-commerce hosting websites. These are managed by specialists to whom many fashion and luxury brands entrust their online presence (Aiolfi and Sabbadin, 2019).

Furthermore, with reference to the luxury sector, multichannel consumers are increasingly informed and complex. They tend not to spend too much time, yet they expect to have an ever wider selection of products, available at all times and everywhere. (Piotrowicz and Cuthbertson, 2014). These peculiarities justify the eagerness of brands to have all the features they consider fundamental to provide a flawless experience to the client.

2.2 Digital Platforms

2.2.1 Overview

A digital platform consists of a logical cluster of activities and associated technology that delivers on a specific business goal and can therefore be run as a business or as a service (Bossert and Desmet, 2019). According to Sriram et al. (2015): "Two-sided platforms refer to intermediaries that facilitate economic interaction between two sets of agents wherein the decisions of one set of agents are likely to have an effect on the other via direct and/or indirect externalities."

In fact, in this category of businesses, the value proposition is not the direct deliver of the product or service. Instead, what is made available is just a set of capabilities, algorithm-related, that support an operation, justifying the platform's ability to be scaled up for an infinity number of users. This type of setup enables companies to innovate, modularize competences and quickly scale if needed (Bossert and Desmet, 2019).

The use of these platform is tranversal to numerous areas: technology services, operating systems, e-commerce or video-games. As with any market, opportunities are limited to the size of customers yet to to become users, forcing each platform to cluster as many customers as possible (Jacobides et al., 2018).

On the same note, as the majority of technical work is already done, the only cost of adding a new user is the setup. Based on this, the business model built around these platforms, favours the ones with the higher number of clients on their segment. The competitive advantage depends on the number of users that join the platform and the long-term on the defensibility and dominance capacity to retain users (Armstrong, 2006; Rochet and Tirole, 2006).

When the services available are no longer sufficient to retain customers, they may shift to another ecosystem if the conditions no longer favor them. As a consequence, a platform needs to consistently innovate so that customers feel they are part of something bigger than them, that develops new features by itself (Jacobides et al., 2018).

2.2.2 E-commerce Platforms

Built as a digital platform, a third party e-commerce service is a business framework system, which regulates the multiple elements of an online business. It provides comprehensive network resources, safe online payment and an effective management mechanism to achieve resources-sharing and the true e-commerce effectively (Ji and Liu, 2011).

The core competitiveness theory presented by Prahalad and Hamel (1990) states that companies should outsource the non-core part of their business to specialized companies. By focusing resources and human capacity in their core business, ultimately improving their core competitive power (Sun et al., 2013). Developing a reliable e-commerce fulfillment operation (dedicated stock points, information systems, technological infrastructure) requires large initial capital allocations as well as sustained investments over time, particularly when the life cycles of information technology systems continue to shorten with rapid technology changes (Tarn et al., 2003). By outsourcing these services, retailers can expect cost savings, but also speed up their online channel introduction. Furthermore, the outsourcing of e-commerce functions facilitates the access to superior expertise, business risk mitigation, strategic flexibility and asset transfer (by taking advantage of 3PL inventory financing) (Holcomb and Hitt, 2007).

As type of brands who consider setting up their e-commerce channel on top of one of these platforms is different, many platforms have chosen a clear market positioning that is distinct from rival firms'. That is the case for luxury e-commerce platforms which implies assembling and structuring a platform ecosystem that has a value proposition different from the one of its competitors. This is referred as distinctive positioning to accentuate the strategic challenge platforms face in their pursuit of market opportunities: namely, selecting how similar the array of offered features should be, relative to its rivals' (Carnahan et al., 2013).

2.3 Portfolio Management

As organizations increasingly engage in projects to fulfill their business objectives, the effective management and coordination of these projects has become an important task in recent years. The concept of project portfolio management has originally been introduced in the context of construction projects, new product development (NPD) and research & development projects (Blomquist and Müller, 2006). Increasingly, however, attention is moving from the complexities in the parent organization towards the customer needs and uncertainties and risks in the broader business environment as factors influencing the use and success of project portfolio management practice (Artto et al., 2008).

Emerging digital technologies are radically reshaping customers' expectations and broadened the scope of opportunities for companies to invest in new innovative products and services (Fichman et al., 2014). At the same time, organizations need to exploit their existing information technology (IT) capabilities to adequately support their business strategy, business processes and operations (Venkatraman et al., 1993). These dichotomous demands magnify the need for organizations to maintain an increasingly large array of heterogeneous projects. Consequently, many companies utilize project portfolio management to select, prioritize and manage the organizational set of, often interdependent, initiatives. These compete for limited resources and vary considerably in effort, objectives and complexity (Archer and Ghasemzadeh, 1999). However, it is often not easy to rigorously manage all those projects as emerging technologies that disrupt companies' traditional operating models and the dynamic business demands are uncertain and ambiguous. That variability require recurrent adjustments of project portfolios and compel organizations to deliver projects at an increasing rate (Kock and Gemünden, 2016).

Nonetheless, a portfolio management approach is useless if no sort of evaluation is performed to assess the relevance of each project. In practice, it is observed that immature projects that are intended to start beyond the portfolio planning horizon are often approved purely to have them approved as soon as possible (e.g. to seize incentives). These projects are usually initiated with unclear requirement specifications or effort estimations, resulting in a portfolio that is cluttered by ill-defined and ineffective projects that drain resources from other projects (Hoffmann et al., 2020). As more projects are approved than are manageable, portfolio management loses its overall flexibility to meet truly urgent short-term needs. The effective use of business cases at the project portfolio level is significantly related with a successful project portfolio (Kopmann et al., 2015).

There are already numerous models to correctly manage which projects to include in a portfolio. Some authors, such as Cooper et al. (1997, 2001), Hutchison-Krupat and Kavadias (2013) and Artto et al. (2008) characterize some of the available strategies:

• Top-down, strategic buckets: Starting at the top of the business's strategy, the business plan is designed.: its goals, objectives and where to focus capacity. Sequentially, financial and human resources are splitted, either between project types, product lines, markets or industry sectors. As strategic buckets or envelopes of resources are established, within each one, all projects (active, on-hold and new) are listed and ranked until no further availability of resources in that bucket. This results in multiple aggregated portfolios, one per each strategic goal as well as a true reflection of strategic priorities on the budget for that period of allocation;

• Top-down, product roadmap: Similarly, by focusing on the business development strategy, several areas of strategic focus (such as markets, technologies or products) are selected. In order to accomplish success within each one, major initiatives to be undertaken are selected. The end result is a mapping of these initiatives along a timeline – the product roadmap. The selected projects are 100% strategically driven;

• Bottom-up: Contrary to the previous two approach, this one bases decision on individual projects. Follows the premise that if good decisions are made at the lower level, the portfolio will also be correctly adjusted. That is, by ensuring that the project evaluation system is working well, only strategic fit projects are accepted and the poor ones are descoped, resulting in a solid and congruent portfolio. To ensure alignment between single projects, a number of strategic fit questions and reviews should be performed. As a result, the portfolio will indeed consist of all "on strategy" projects.

2.4 Project Management and Evaluation

As each new feature to be developed can be perceived as a new project, it is paramount to address different project management and evaluation methodologies. Different approaches were compared by authors such as Cooper (1990), MacCormack et al. (2012), Ballard and Howell (2003), Poh et al. (2001) and Project Management Institute (2013). Given this, the course of action that better fitted the current problem and scope were Stage-Gate for new product development and Analytic Hierarchy Process as the weighting and ranking method.

2.4.1 Stage-Gate[®] Innovation

There are plenty of approaches, methods and tools available to address the issue on how to create products which will be innovative and successful on the market. One of the best methods for improving the situation concerning innovations is the stage-gate process. Innovation can cause a radical increase in costs compared to the value that they bring to the customer (Broum et al., 2011).

The stage-gate process is one of the best known methods for the process of developing new products. It was created and registered by Robert G. Cooper (1990). Stage-Gate system models the innovation process from idea to launch and impacts the speed of development, likelihood of the success of the product, ensures discipline in the process, reduces effort wastage, leads to efficient utilization of resources, which eventually increases effectiveness of the overall process of product development (Cooper, 2014).

World renowned companies have been using the Stage-Gate project management system to achieve good results in terms of product innovation since it was developed. The stage-Gate system applies the process management methodologies to product innovation process, leading to shorter launch times, fewer errors and more success. The process is divided in a number of stages and each stage is further divided in a number of activities that take place in that particular stage. There is a set of outcomes expected from each stage in order to validate the results of the set of activities at every stage (Bhatia et al., 2017). Between each stage there is a checkpoint which is a quality control checkpoint known as gate, as it can be seen in Figure 2.1:



Figure 2.1: Stage-gate model (Cooper, 2001)

Each gate has a set of quality criteria that has to be fulfilled in order to get a go decision. Ideas are screened with reference to the criteria such as business strategy, feasibility, opportunities, financial returns and market attractiveness set up by the management (Ng and Yeung, 2013). However at the earlier stages of development, criteria such as technical feasibility, probability of success and market potential are the most important at the development process. The product performance, quality and meeting the budget have stronger importance on the last stages of the process (Schmidt et al., 2009).

These gates consist of decision points where the project itself is questioned and held to criteria determined by the organization. The decisions at the gates determine the outcome of the project: move forward, discard or archive for later. Often, the early stages include technical and market feasibility studies as pre-development work. These are usually lower cost criteria used to understand the project's feasibility and business case profitability (Cooper, 1990).

Review points are fundamental for effective new development process as they provide an adequate mechanism to control risk. These gates tend to be the moment when companies dismiss relatively weaker projects in order to allocate effort and resources to ones with higher foreseeable importance (Schmidt et al., 2009).

In comparison with incremental projects, the radical innovation ones generally involve a higher degree of uncertainty and risk at the business, technological and financial aspects (Green et al., 1995). Therefore, to guarantee the successful development of radical innovation projects, it is necessary to adopt methodologies for risk management and uncertainties mitigation (Koen, 2004). As radical innovations are riskier than incremental ones, the number of review points, also known as gates, should necessarily be higher. The more extensive the process is, higher the probably of ditching eventually unsuccessful projects. Consequently, the survival rate of truly radical projects is lower if compared to lower risk projects (Schmidt et al., 2009).

2.4.2 Commonly used criteria

When it comes to evaluating projects, there are a number of criteria that could be used to determine if a project is worth developing or not. These factors of evaluation, assess the fit of the project given the organization strategy and risk tolerance. The most commonly used and the ones presented below:

• Financially, the economic expected return can be estimated by using Net Present Value (NPV) or even Expected Commercial Value (ECV). However, a better practise is determining the project's Net Present Value and ranking them by NPV divided by the key or constraining resource (e.g. R&D costs still left to be spent on the project: NPV/R&D). Projects are then rank-ordered according to this index until no more resources are available, therefore maximizing the value of the portfolio (the sum of the NPVs across all projects) for a given or limited resource expenditure (Mikkola, 2001). As an alternative, Internal Rate of Return, Return on Investment and PayBack Period can also be used (Archer and Ghasemzadeh, 1999; Blomquist and Müller, 2006);

• Risk is a combination of the probability of an event (usually an undesirable occurrence) and the consequences associated with that event. Every project has some risk associated, such as overbudget or not meeting the objectives specified for it. To analyze project risk, a project is first decomposed into component activities, forming the project's work breakdown structure (WBS) as suggested on the Project Management Body of Knowledge (PMBOK) by Project Management Institute (2013). Risk events relating to each activity are identified and their probabilities and consequences estimated. The information used in estimating risk can range from opinions, technical outputs or historical data on similar projects. In order to estimate the overall risk, numerous models can be used to combine risks from individual activities. It is important to aggregate all risks from a project as some may even be interdependent. Usually, the models used for this risk analysis include Monte Carlo simulation, decision theory and Bayesian statistical theory and decision theory. The array of projects on a portfolio should be balanced. Over-commitment to high risk

projects should be avoided in order to have a evened portfolio also with lower risk ones (Archer and Ghasemzadeh, 1999; Kock and Gemünden, 2016);

• Strategic alignment measures how well a project contributes to a common long term objective. In order to measure this fit adjustment, common metrics are the degree to which project is aligned, strategic importance, and synergies with other projects on portfolio (Cooper et al., 2001) Furthermore, market research can be used to collect data for forecasting demand and to gauge the potential market. Techniques to be used include consumer panels, perceptual maps, preference mapping and competition based analysis to test the fit for the market (Hines, 2000).

2.4.3 Analytic Hierarchical Process

Generally defined as AHP, Analytic Hierarchical Process is a procedure for structuring and guiding multi-criteria decision problems, with objectives and criteria being structured analytically in a hierarchical order. Analytic means that the decision problem is analyzed mathematically by means of logical conclusions (Zimmer et al., 2012). The application of this process converts individual preferences into ratio scale weights. These relative weights are then used to rank the alternative options and smooth out the decision process (Forman and Gass, 2001).

Another related process proposed by the same author is Analytic Network Process (ANP) (Saaty, 2004), that also provides a framework for dealing with decision-making or evaluation of problems. AHP models assume a top-down relationship among decision levels, which means that bias could occur when the criteria and subcriteria are correlated with each other. ANP is more versatile and does not require a purely hierarchical structure but allows more complex relationship structures among decision levels. ANP generalizes the problem modeling process by using a network of criteria and alternatives (all called elements), grouped into clusters. All the elements in the network can be related in any possible way (Smith-Perera et al., 2010). However, due the nature of the variables used throughout the current project, a strictly hierarchical relationship between criteria and sub-criteria should be used.

The main advantages of the AHP defined by Forman and Gass (2001) are listed below:

- Structure complexity: The hierarchical structure and the deductive approach with an objective, criteria and subcriteria is the most common and natural way for humans to deal with complexity. This structure supports the decider with regard to an analysis of the decision problem;
- Measurement on a ratio scale: In the AHP the decider gives judgments regarding a ratio for criteria and different alternatives or other criteria. Besides enabling the comparison of criteria with qualitative as well as quantitative scales, it facilitates the limited human capability to rational judgment;
- Synthesize results: Analysing and structuring the decision problem is the first step to reduce complexity. The overall objective is structured in several criteria and sub-criteria. The

alternatives are evaluated with regard to these criteria. The next step is the synthesis. The individual results are put together and combined into one total result;

• Consistency check: The reliability of decisions and evaluations with a low consistency is lower than for decisions and evaluations with a high consistency. Only decisions and evaluations with a defined consistency are acceptable as other decisions and evaluations might be random. This is particularly important for multi-criteria decision-making problems with a large number of criteria.

As stated by the name, it is a process used in decision making that follows a set of steps. Initially, the decision problem is defined and subdivided into different criteria and sub-criteria to be pondered for evaluation. The elements of one level must belong to the same category in order to be comparable to each other. In addition, it is necessary to ensure the independence of the evaluations from other evaluations at different hierarchy levels. Lastly, all relevant criteria and alternatives must be considered for the comparison to be executed (Saaty, 1990).

To make the comparisons, there is the needed for a scale of numbers that indicates how relatively more important one criteria is over another element (Saaty, 2008). Following the prerequisites stated above, each criteria of one level is compared to all other criteria of the same level. Then, at each level, relative priorities can be calculated if all pairwise comparisons are consistent (Zimmer et al., 2012). For that, a common absolute scale is used, ranging from 1 to 9, as presented in the Table 2.1.

Importance	Definition	Explanation
1	Equal Importance	Two activities contribute equally to the objective
2	Weak or slight	
3	Moderate importance	Experience and judgement slightly favour one activity over another
4	Moderate plus	
5	Strong importance	Experience and judgment strongly favor one ac-
		tivity over another
6	Strong plus	
7	Very strong or demonstrated	An activity is favored very strongly over another;
	importance	its dominance is demonstrated in practice
8	Very, very strong importance	
9	Extreme importance	The evidence favoring one activity over another
		is of the highest possible order of affirmation

Table 2.1: 1 to 9 point scale (Saaty and Vargas, 2001)

One objective of the AHP is the derivation of weights and priorities from paired comparisons. There are different methods available to determine the priority vector (\mathbf{w}). One is Eigen Vector Method, showcased by (Saaty and Vargas, 2001) and shown on the Table 2.2:

]	Evaluation N	1	Normaliz		Weight			
	a ₁	a ₂		an	a ₁	a ₂	 an	ri	
a_1	a ₁₁ =1	a ₁₂		a _{1n}	a ₁₁ /c ₁	a_{12}/c_2	 a _{1n} /c _n	r_1	$w_1 = r_1/n$
a_2	$a_{21}=1/a_2$	1		a _{2n}	a_{21}/c_1	a_{22}/c_2	 a _{2n} /c _n	r ₂	$w_2 = r_2/n$
			1				 		
an	a _{n1}	an2		ann=1	a_{n1}/c_1	a_{n1}/c_2	ann/cn	r _n	w _n =r _n /n
ci	$c_1 = \sum_{i=1}^{n} a_{i1}$	$c_1 = \sum_{i=1}^{n} a_{i2}$		$c_n = \sum_{i=1}^n a_{in}$	1	1	 1	n	1

Table 2.2: Normalization matrix

First the column sums (c) of the evaluation matrix have to be formed. Then the ratios (a) are divided by the column sums (c). The result is the normalized matrix scaled to 1. The priority vector (w) of the corresponding elements is achieved when the row sum (r) of the normalized matrix is divided by the number of elements (n). With this procedure corresponding to the hierarchy level the individual priority vectors can be achieved (Hadi-Vencheh and Niazi-Motlagh, 2011).

AHP incorporates an effective technique for checking the consistency of the evaluations made by the decision maker when building each of the pairwise comparison matrices involved in the process. To check those incongruences, consistency is calculated. For the evaluation of the consistency first the row sum of the average matrix (\mathbf{r}_i) has to be calculated. This term is obtained by forming an average matrix (Table 2.3).

Table 2.3: Calculation of average matrix (Saaty and Vargas 2001)

	a ₁	a ₂	 an	$\bar{r_1}$
a ₁	w ₁ *a ₁₁	w ₂ *a ₁₂	 w _n *a _{1n}	$\bar{r}_i = \sum_{i=1}^n w_i * a_{1i}$
a ₂	w ₁ *a ₂₁	w ₂ *a ₂₂	 $w_n \ast a_{2n}$	$\bar{r_2}$
an	w ₁ *a _{n1}	$w_2 * a_{n2}$	 w _n *a _{nn}	$\bar{r_n}$

Then the Eigen Value has to be calculated with: $\lambda = \frac{\bar{r_1}}{w_i * a_i}$

The principle Eigen Value (λ_{max}) of the average matrix is, shown on: $\lambda_{max} = \frac{\sum_{i=1}^{n} \lambda_i}{n}$

And finally: $CI = \frac{\lambda_{max} - n}{n-1}$ and Consistency Ratio is calculated with: $CR = \frac{CI}{R}$, with *R* being the Random Consistency Index.

Saaty (1990) suggests rethinking the evaluation of the pairwise comparisons when CR is about or below 10%. When the consistency is good, a sensitivity analysis can be carried out. If the results are not satisfying, the complete process is iterated. For this purpose the criteria weights are changed to check whether the model is stable. When the stability is good a final evaluation of the single alternatives is carried out (Smith-Perera et al., 2010).

Chapter 3

Problem Description

With the growing number of brands enrolling Farfetch Platform Solutions (FPS), so does the number of requests received for new features to be implemented. These are not just increasing in number but also in complexity and effort between all teams. Given this core issue, in the present section the impacts in different functional areas will be presented and characterized, even though the view to be presented will be mostly related to the impact on operations as it was the team where the work was conducted.

3.1 Change Requests

A change request could be defined as a change of scope originally defined between FPS and the brand. Exemplifying, it could be the simple change of the title font on the website or a more complex addition of a new customer service language. The effort needed is not the same for all requests neither their impact on the teams. Status-wise, these requests can be of two different types: either from new clients at the project phase, when the website and the operations are being set up or from clients already with live websites that decided to change or add any new functionality. It is fundamental to distinguish between these two types of clients as the implications are not the same when the different requests are made.

Before a brand becomes a live client, it passes through a process designed to smooth out the integration on the platform. It is a sequential process with five clear steps: First Contact, Discovery, Design, Execution and Live, as shown in Figure 3.1. Based on which step a client is, it is possible to know how far in the development process it is. Change requests may occur at any time before or after project completion.



Figure 3.1: Project phases of the onboarding process of a new client

Each step is defined by a clear set of actions that needs to be done before it is possible to move forward for the next project phase. A brief description for each step is presented below:

- **First Contact** After an initial contact by one of the two parts involved (either Farfetch or the brand), the commercial department is responsible to inform all the teams involved about the prospects of a new client joining the platform. This is fundamental as teams become aware that unexpected projects may need to be included on that team's roadmap.
- **Discovery** The consultation begins and an initial overview of the project is made, based on the brand's needs and expectations. All the capabilities available are presented to the client so that he knows what services are to be expected. Teams from all the different areas involved gather up the needs from the brand and cross-check them with the capabilities and services Farfetch has available at the time. The points for which there is no immediate accessible solution are considered gaps. Some of the gaps lack reasoning, such as being too specific and niche related or too complex to be developed and implemented during the project phase. For others, it may make sense to analyse the issue and design a solution to tackle that given gap. These are the new feature requests that the present work is based on.

At this point in time, the negotiation with the client begins regarding which gaps are fundamental to be overcome in order to move the project forward. A discovery report is prepared expliciting all the gaps that were mapped and only in case there is the need to design new solutions, the process proceeds to the design phase.

• **Design** - When there is the need for new developments, there is the need for multiple teams to be involved in this phase. Firstly, if the gap to be analysed involves operations, two specific teams are involved. When physical retail is needed, a specific branch of the operations team, Retail Operations, is involved. Otherwise, the Solutions team is responsible for the design.

As operations is only a part of what is needed for e-commerce or augmented retail, the design usually involves other teams, as more complex solutions may need core technological changes in the platform. Usually this tends to involve the front-end and back-end product teams. Given the autonomy each team has, sometimes the agreement between them on the prioritization of the problem is not easy. If the gaps can be resolved, the contractual agreement is made and the solution design for those gaps is included on the scope of the project and registered on the blueprint. When there is a sign off, the project begins and the Execution phase starts.

• Execution - A project manager is associated with the project and becomes responsible for managing it according to the dates contractually agreed with the brand. Similarly to operations, the rest of the teams involved also have someone responsible for the coordination on their side. Change requests may happen, during this phase, if the client requests additional service besides the ones registered on the original addendum of the contract.
• Live - After the project is completed, the client is still actively involved with the teams. Reportings on key success metrics (KPI) are performed in order to help the client get a sense on how well business is doing. There are regular meetings with the brands in order to try tackling some of the issues affecting the KPIs such as cancellation rates, percentage of no stocks (more orders were made than available items to fulfill them) and sales related metrics (Average Order Value, Number of Orders, Gross Transaction Value). Besides this, smaller requests such as the addition of a stockpoint or contact information changes may be presented.

The project manager is no longer entitled for this client's project, handing it over to a Client Manager. The latter one is responsible to maintain contact with the client, informing the brand about its KPIs and addressing any simple change that inherent may come up during the daily operation. Any change request the brand may have related with operations should be directly addressed to the client managers.

3.2 Catalogued Services vs. New Features

Not all change requests are the same as these can vary in terms of complexity, priority, development and feasibility. It is quite different when a request is a pure minor technical change or when it is a feature requiring development by several teams during consecutive months. These requests also have different magnitudes depending on the size of the client who is asking, in terms of annual Gross Transaction Value (GTV).

Each client is individually positioned in a tier, mainly based on GTV and strategic importance. Depending on which tier a client belongs to, the bargain power is also variable. As the FPS' business model is mostly commission based, specific feature requests may have a much better business case to support them if they are asked by clients on higher tier levels.

In order to have a sense of how impactful some of these requests are, the operations team decided to create a catalogue with every service and feature that was implemented at least once. Although there was once the need for development, this catalog only showcases the recurring cost of implementation, every time a new set up needs to be done. One example of a feature retrieved from the catalog is the following one in Table 3.1.

Feature/ Service	Description	Tasks	Responsible	Estimated hours
Stock points creation and configuration	Create and configure in the	Gather definitions and decision with the brand	Project/Client Manager	х
	stock/inventory of a partner is storaged, – which is identified by a name and a code	Stock point association validation	Business Analyst	У
		New store setup - Carrier Accounts Setup (pick-up times, DHL alert, etc.)	Delivery Support Technician	Z

Table 3.1: Example of feature registered in the Services Catalogue

Consequently, it is possible to show to the client the current capabilities and what is available for them to choose from, without the need for additional development's time and costs. As each feature was already implemented, the effort needed in terms of hours was already assessed, as well as the design of the process. Based on the hourly rate of each person, it is possibly to transpose those hours into a real cost. This way, the commercial team has visibility on the incurred costs when that feature is made available to the client, being able to mark up that price knowing how much to charge the client to have that service implemented on their operations setup. Therefore, when the request is for one of these catalogued services, no major decision needs to be taken as they are already designed with defined processes, requiring just the tasks' execution. The increased scale of use turns a single feature on a profitable one.

When it comes to the request of new features, everything is less structured. It is impossible to clearly foresee the costs of development and implementation as well as technical challenges that may arise, culminating in a higher risk and unpredictability.

The usual approach conducted previously was to have *ad-hoc* evaluations for every request that was not present in the services catalogue, since there were no established processes when requests such as these were presented. It made sense during the past when the company tried to be agile and quick. It tried to fulfill the requirements of a handful of clients that enrolled its e-commerce services when the capabilities were not as strong as they currently are. Yet, the approach proved not to be successful when dealing with an increasing number of contractualized brands and non ending features requests. Some were even recurrent by multiple clients, but its relevance could never be quantified in order to justify its approval.

3.3 Unstructured Approach

Each functional area has a direct communication channel with the client brands usually through regular meetings. These are intended mainly for feedback and minor adjustments that may be needed throughout the time. Included in these meetings are Operations, Product, Technology, Integrations, Commercial and Partner Success teams. Given the fact that communication is not centralized on a single entity, the goal is that the communication flow reaches only the necessary teams without the need for micro management.

Nonetheless, decentralized information is not always good and results in a lack of transparency between all stakeholders about which requests have been made by the clients. This is particularly impactful as the majority of requests are transversal projects that demand the involvement of more than one team. Moreover, some teams comply with the request before consulting every stakeholder in order to understand the feasibility of the development. Some even agree upon a feature's delivery date without assessing the availability of the other teams, given that the effort is usually different between the distinct functional units.

As a result the overall picture is lost by everyone, there is the possibility of replication and the evaluation of strategic fit is relative to the team who is making that judgment.

As it was expected, not all teams had the same perception of what was the course of action to follow when a new feature request took place. However, all agreed on one thing: there was no designed process to be used as a guide for the information flow or to uniformize the procedures to be followed. Despite this, usually within the same team, people had the same understanding of whom to inform and who was the clear stakeholder. This means the existence of a certain degree of calibration inside teams. The Product team was broadly considered the main stakeholder and the team to contact in case of doubt.

In order to understand most of the existing problems, some interviews were conducted with the main stakeholders to gather their different point of view. The interviews will be detailed further on Chapter 4. With all the information collected, the problem became clear on what were the issues and which were the points to be improved.

Regarding the good practices that exist, some were quite relevant. Firstly, most teams do a preliminary evaluation when the request is submitted, discarding immediately the ones that lack strategic alignment. This basic evaluation ultimately leads to three different answers to the client:

- It is a feature that Farfetch should already have, therefore makes no sense to charge for the development of a feature that should already exist. This way, only the setup cost of implementation will be charged to the client while the cost of development is imputed to Farfetch;
- The feature is so specific that no other client is expected to use that feature in the future. This means that, if there is capacity, the client is entitled to fully pay for the development;
- Even though the feature makes sense, Farfetch sees no long-term use for it, being the client responsible to pay for the development. However, if it is used again on another client, the brand is entitled to be reimbursed for the money spent.

All teams acknowledge that the inexistence of a process was not a problem since, at the beginning, the number of clients and amount of requests was small enough to be evaluated *ad-hoc*.

In addition, there was a lack of clarity on the amount of requests currently being received on an yearly basis, since each team kept its own backlog and information was not shared. Moreover, teams lacked transparency on what was being developed by others. As the defined roadmap was changed in order to accommodate the development of a request, no update was given to the directly involved teams.

Considering the Product team as the main stakeholder was also a bad practise. The team accepted only feature requests that made sense for them without validating with the rest of the required teams and, sometimes even, agreed upon delivery dates with the client. As a result, teams were working with very tight deadlines, to which they were never asked for their capacity to do so, resulting in extended delivery dates.

3.4 Portfolio Management Routines

As the number of projects to be analysed and developed increased, there was the need for a single entity to aggregate and manage all those projects and requests, hence the creation of the Portfolio Management team. The team manages every operations related project. Its objective

is to follow-up projects, map individual risks as well as transversal ones, assuring quality in the projects delivery and guaranteeing the delivery on the contractualized deadlines. In addition, the newly created team also plans the projects pipeline for the semester, estimates the budget allocation needed and continuously compares the real costs against the previously planned ones. In order to guarantee the ceaseless follow up of all projects, regular status meetings with key stakeholders are conducted.

With a transversal array of the projects, every manager needs to follow the progress along time as well as to intervene when, for any reason, a project does not go as planned as there might have impact on the team. As a result, a monthly routine of a Portfolio Committee was established. The end goal was to have all managers from the Platform Operations team informed as well as collecting their feedback and insights. Besides this, the committee is also used as a *quorum* for key decision making. In Figure 3.2, it is illustrated that there is a committee analysis between each major phase of development of a new project, as well as the information flow between every stakeholder involved.



Figure 3.2: Portfolio Committee decision points and information flow

In addition, as changes of scope are always being requested, no matter the planning effort that is taken, Portfolio needs to continuously reassess the pipeline given all those shifts. The Portfolio Committee also has here the duty of managing those requests and collectively giving its opinion on each feature asked. Given the number and wide array of projects under the portfolio's scope, the pure insistence of a client is no longer enough to make a request move forward to development. This constituted a problem as each analysis was subjective and made without a clear understanding of the big picture despite all the effort to balance resources. At this moment, the portfolio team needs to adopt a strategy to asses the new features requests.

The need to adopt a framework aiming at helping decision makers is the reason behind this project. Given the number of requests coming to the operations team, it is impossible to carefully evaluate each one without a systematized approach, thus the need to preliminary appraise and only take to the committee the more relevant requests to be debated.

Chapter 4

New Portfolio Management Framework

Once presented the main issues that require action, a complete revamp of evaluation process of new feature requests was needed. In order to create an useful tool to aid the decision of approval, a define methodology was used for the framework creation.

Initial interviews were conducted to recognize the main difficulties teams faced. Based on the output, the framework was designed. Given the need for a structured financial evaluation to be included in the framework, a business case template tool was also designed.

Considering the limited time when this project was conducted, it is important to ensure the continuity of the implementation process even after the end of the project. To do so, three different sequential stages are presented to guide the adoption of the framework in the teams' routines.

4.1 Requirements' Interviews

Given the size of the company, it is crucial that teams remain in frequent contact as the majority of projects are transversal ones. Aware that the present work was conducted on only one stakeholder involved in the process of new feature's development and evaluation, it was crucial to start by gathering the critical issues and the point of view of each team.

As described before, the directly connected teams with the client are Commercial, Product and Platform Operations. The latter one is composed of many different subgroups, each with specific sets of action, so even those had to be considered. Directors, commercial representatives, product managers, project managers, client managers and pricing specialists were interviewed. The interviews had to be conducted for all business units including E-commerce, Store of the Future, Connected Retail and New Business Models (such as second-hand resale). This culminated in thirteen interviews with people ranging from all company's hierarchical levels.

The questionnaire tried to tackle every step of the process, without leaving any relevant topic unanswered. The interview template was structured around three key points: transversal overview, as-is state and specific questions catered to each team. In order to structure the interview and facilitate the description of the previous situation, the questions were divided into Organization, Processes, Tools and People as shown in Table 4.1. The main objective for using each of these four principles is described below:

Organization: understanding the way the coordination between teams is done in order to ensure the play out of the designed roles by each stakeholder;

Processes: objectively getting a sense of the information flow and the routines that take place in order to guarantee uniform procedures;

Tools: perceiving which tools are used, both the communication channels (formal and informal) and the tool for data record that is used to prevent information loss;

People: identifying the clear position each stakeholder has, as well as its responsibilities.

Principle	Question
Organization	"What is the current approach when clients ask for a particular feature not yet
	developed and not in the catalogue?"
Organization	"How do you organize the work within the several teams?"
Processes	"How do you receive those requests? What is the channel?"
Processes	"Could you describe the flow of information after receiving the request?"
Tools	"Which are the tools used to support the process? Any systems used to
10015	create the process, organize the flow?"
People	"Which teams from the organization are involved in the new feature request?
Георіс	And which responsabilities each team has?"
People	"Which teams in the organization have impact on the go/no go decision?
reopie	Is there a clear stakeholder in the decision making?"

Table 4.1: Structure of the interview questions

The interviews were the first step used to understand the problem. The information collected was fundamental to guide the rest of the approach as it allowed the understanding of the routines inherently used in the company. The results were summarize in Table A.1 in Appendix A. With this, the value proposition of the framework designed is increased as it can be easily integrated into the company's and teams' current ways of working.

4.2 Framework Development

When evaluating if new features/services should be developed, it is fundamental to have a clear understanding on the impacts of that development both in the short and long term. There is the need for a structured way to assess the uncertainty and the impacts a new feature poses. By minimizing risks, maximizing the possible future adoption rate and correctly prioritizing what is urgent against what is not, that assessment can be correctly done.

It is important to acknowledge the importance of using tools to facilitate and standardize that process. The use of a framework, like the one designed, serves this purpose as its criteria are the same, regardless of the user entitled to use it.

The framework itself can be seen as an assembly of three different part: the user interface, the model used to support it and the different database inputs. All of these are needed for it to work properly, as shown in Figure 4.1.



Figure 4.1: Project Portfolio Selection Decision Support System (Archer and Ghasemzadeh, 1999)

Regarding the user interface, the framework was developed using Microsoft Excel since it was one of the team's most used tools, meaning that all users were technical capable of using it and of understanding how it worked. In terms of model used to support the decision making, it includes the use of different criteria for the assessment and the application of the Analytic Hierarchy Process for a combined score based evaluation. Lastly the different databases and subsets of information used to support the model are all explicited in Figure B.1 in Appendix B.

The request of new features can be seen as the generation of ideas on which some will eventually be successful and approved and others may be discarded or rejected. This logic resembles the Stage-Gate [®] Innovation process previously presented on Section 2.4.1.

The way the framework was modelled follows the same principles as the stage-gate process. At the beginning every idea is considered and ends up being recurrently validated each time it passes through one gate. The criteria used is different along the process. At the beginning, determinative factors ensure essential information is collected. Without it, evaluation does not proceed. The closer an idea is of the final approval, the more restrictive should be the criteria. This way, the process does not get filled by requests that make no sense to be the object of a more detailed evaluation, increasing the agility and speed of the framework. In order to make the framework transversal to technological and strategic criteria, four different gates of evaluation were chosen: the **Basic Insights** for the request to even be admitted for further analysis, the **Strategic Fit**, the **Business Development** and finally the **Financial Evaluation**. Each one of these gates was designed with the purpose of tackling a different matter on a sequential basis. The complexity of the gate evaluation increases while moving the requests downstream the funnel, which creates agility important when there is a high number of requests seeking evaluation.

Given the need to make a decision on whether or not to move forward with the evaluation, a set of criteria had to be defined as a way to measure specific subjects on each gate. These criteria had to be complementary in terms of information collected and easy to obtain, as a way to ensure the correct assessment of all the needed information.

In Figure 4.2, the innovation funnel used for the evaluation is illustrated as well as the set of criteria used at each gate, from the moment a feature request is received until its approval for development.



Figure 4.2: Framework structure and criteria used on each gate

Considering how different the information is amongst the criteria, the sources that are used as inputs to the framework are also substantially disparate. This means that the information to be used needs to be collected from different sources. As, this is not a static process and information changes quite fast considering the market where the company operates, information needs to be kept up to date on a recurrent process. In other terms, if the inputs are not updated, the framework will loose its ability to capture the value of the request with most recent information available.

As a way to simplify this process, the information flow model (shown in Figure B.1 in Appendix B) was designed to correctly inform who is the one responsible for each input, what is the source of that information and how frequently an update needs to be executed.

As the evaluation performed at each gate is not the same, it is fundamental to explicit each one of the four gates as well as the logic behind their design. It is important to keep in mind that even thought these gates are complementary they are also sequential, meaning that the evaluation can discard a request at any gate without being subject to a complete evaluation.

4.2.1 First Gate - Basic Insights

Many of the requests that reach Farfetch occurred during a conversation or meeting with a brand representative. Some are presented as nice to have features and the client does not even push too much for its development. As the request owner tries to gather information to fill the initial form of the request, only if the client truly feels the need for that feature, will he present any number or metric to support its request. Therefore, the first gate may act as a deterrent for not clearly thought requests that the client, after all, only referred to as a suggestion and not as a need. If the client cannot quantify the size of the opportunity or the expected improvement in sales experience, tends to mean that not clear thought was put on the request.

The same gate also serves two other purposes. When the most relevant information is collected, it is fundamental to assess the feasibility of the request, meaning that the specialist teams need to quickly check it and conclude if there exists any type of technical or legal blocker. If there is no viability to pursue with the request, the evaluation stops at this point and the request is immediately denied. If not, those teams perform as estimation of the complexity of the project.

In addition, the information collected creates the ability to prioritize the requests based on the clients who made them, the commercial tier to which they belong and the opportunity size presented. This gate is fundamental to cope with a large number of requests, specially at the beginning where no automated process is used to ease the initial assessment. If there is no capacity to review all requests, it makes sense to only put effort on the truly relevant ones.

4.2.2 Second Gate - Strategic Fit

Moving on to the second gate, the evaluation is more associated with the strategic relevance of that feature. The criteria used during this stage can be grouped into two main groups: internal and external strategies. Internal strategy are the company's self made guidelines and external strategy are the general rules and trends, out of scope of the company's action.

When addressing the internal strategic fit, three different hierarchical levels have to be taken into account. Starting at the company's strategy, it is defined by Farfetch's goals as well as the pillars on which its strategy is built. These ideas are transversal to the whole company and to all functional areas. This information was obtained from the company's internal communications and press releases.

One hierarchical level below, on the department level, the strategic principles to be considered in the assessment are mainly related with the field on which the department operates. As the team is positioned within the operations department, the strategic guidelines are associated with operations related activities, such as payments, customer service, fulfillment and delivery. This input is collected from the semiannual strategic planning of the department.

The most specific of them all, the team's strategy, is more related with the daily issues and concrete thoughts of what the team envisions for its internal structure and overall positioning. These are the same guidelines used to define the objectives and key results during the strategic planning cycle.

When addressing the external strategic fit, the evaluation is more demanding as the information to be used is not as easy to get as the internal one. The logical concept is to assess if that feature is one capability currently offered by competitors, if it fits the shifting path of the overall consumer market and if is aligned with the e-commerce and retail trends.

This information was previously collected and compiled to smooth out the evaluation process for any user of the framework. Market analysis reports from numerous consulting companies were analyzed and critically summarized. In addition, a competitor's mapping was done based on information publicly disclosed by them on advertising. Obviously these reports are not static and need to be updated at a certain frequency, usually semiannually, to keep the framework as up to date as once it was created.

4.2.3 Third Gate - Business Development

No matter how strategically robust a feature is, it is not possible to develop it without the joint effort of all teams in the execution phase. This is the reason why the feature needs to be cross-checked with more business related criteria.

Besides analysing the relevance of the request, a comparison with the previously discarded features is also important. This backlog of rejected requests can and should be revisited given that past decisions do not determine new ones. This serves, however, the purpose of understanding if similar features got refuted in the past and the reason why that happened. Similarly, it can be a tool used to gauge how frequently similar requests are made.

During daily business, the potential risks of the operation are gathered and followed to ensure the quickest possible action when they no longer remain under control. The development and implementation of a new service may be responsible for the escalation of a risk to a greater likelihood of happening or to do so with more severe consequences. Technical changes on the integration of a feature may compromise the ongoing operation. Therefore, each feature is analysed in order to understand its impacts on the different workstreams or if it poses a new risk in case of approval. The new features may negatively impact KPIs and compromise different service level agreements (SLAs) with the brand.

Given that no development is done with the involvement of just one team, it is crucial to check the projects in which the teams have defined their top priorities. The use of multiple teams' roadmaps facilitates this by granting the transparency needed on what is soon to be developed. In fact, other teams might not have the capacity to leverage another project, unjustifying the need to

continue with the request. For that reason, the roadmaps of Platform Operations and of the Product team, the main developers in terms of products and services, were chosen.

4.2.4 Fourth Gate - Portfolio Evaluation

Lastly, if the request managed to pass the evaluation on the three previous gates, the financial approach to the problem takes place. In order to proceed with the development, the feature has to be lucrative.

A detailed business case is carried out as the way to assess profitability, based on the estimation of costs and revenues. The Portfolio Team is the one responsible for building this business case and, as the last gate of evaluation, the financial result will be the key deciding factor for approval. The detailed description of the business case template created and used for this last gate will be presented further in Section 4.4.

Given the technical complexity estimation yielded by the specialist teams, an approximation of development hours is done based on historical data from features with a similar complexity. This allows the calculation of the operational effort and cost. By calculating the development and implementation costs and by comparing it to the sizing opportunity given by the client, it becomes possible to prove its economic viability.

Furthermore, the impact of the feature on the timeline of the other projects on the portfolio is also considered. If the request is from a client on project, the possibility of having the feature ready at the expected live date is also analysed.

4.3 Score-Based Evaluation

As the evaluation that is performed at each gate is not just done with numerical data, it was important to find a way to balance the use of multicriteria, both with quantitative and qualitative inputs. The approach to be used is based on the score given to each criteria. However, it does not make sense to consider them all with the same relative importance as that is usually not the case. As a way to address this concern, the use of the Analytic Hierarchy Process, described on Section 2.4.3, seemed like the most compelling way to tackle the problem.

Firstly, as the criteria to be used on each gate were already defined, a relative prioritization of the criteria was carried out for the overall evaluation at each gate. In order to do so, and following the AHP methodology, a priority matrix for each gate was defined. Based on a scale of 1 to 9, as shown on Table 2.1 on Section 2.4.3, the relative importance of each criteria was an input of the team based on their knowledge and experience. Following the described methodology, once that input was collected, the relative priorities were calculated.

One other reason supporting the use of AHP is the ability to capture incongruences on the relative priorities that may lead to decisions due to randomness and not due to the real priorities. For that, the Eigenvalues, Consistency Index and Consistency Ratio were calculated and checked

against the maximum thresholds allowed. The values that were not congruent were revised by the team. An example of what was done is shown at Table 4.2 below:

	Status (Live or Project)	Commercial Tier	Opportunity Size	Complexity	PRIORITY	λ
Status (Live or Project)	1	0.33(3)	0.25	3	13.14%	4.04
Commercial Tier	3	1	0.33(3)	3	26.23%	4.21
Opportunity Size	4	3	1	4	51.47%	4.26
Complexity	0.5	0.33(3)	0.25	1	9.17%	4.07
SUM	8.5	4.67	1.83	10	100%	

Table 4.2: Priority Matrix used on the first gate for prioritization

Secondly, for each criteria, it was needed to translate a qualitative assessment into a numerically supported one as a way to reduce variability and keep the process in control no matter who was using the framework tool. By standardizing the scoring model, it was possible to create consistency when classifying the same feature when, otherwise, different stakeholders would probably assign different scores due to variable subjectivity.

In order to systematize the process, answers were previously defined based on the different levels of impact of the feature for each particular criteria. Using a scoreboard ranking matrix, it was possible to have an assigned score to each possible input and, consequently, have a score for each criteria of a certain gate. An example is shown in Table 4.3.

	1	2	3	4	5
E-commerce	Opposite to a trend	Not related with	Related with 1	Related with 2	Related with >2
Trends	opposite to a trend	any trend	current trend	currents trends	current trends
Competitor's	Not offered by any	Similar feature offered	Same feature offered	Same feature offered	Same feature offered
Offerings	competitor	by 1 competitor	by 1 competitor	by >1 competitor	by all competitors
Market	Not in line with	Aligned with 1	Aligned with 2	Aligned with >2	Aligned with all
Trends	any market trend	market trend	market trends	market trends	market trends
Corporate	Not aligned with any	Aligned with 1	Aligned with 2	Aligned with 3	Aligned with 4
Strategy	strategic pillar	strategic pillar	strategic pillars	strategic pillars	strategic pillars
Operations	Not aligned with any	Aligned with 1	Aligned with 2	Aligned with 3	Aligned with 4
Strategy	strategic pillar	strategic pillar	strategic pillars	strategic pillars	strategic pillars
Platform Operations	Not aligned with any	Aligned with 1	Aligned with 2	Aligned with 3	Aligned with 4
Strategy	strategic pillar	strategic pillar	strategic pillars	strategic pillars	strategic pillars

Table 4.3: Scoreboard matrix used for the strategy analysis

The score is weighted using the relative priorities that come from the priority matrix. These priorities are compiled in Table 4.4.

The result is a global score that compiles the information obtained. That score is compared against a minimum threshold in order to keep the request moving forward on the evaluation funnel. The thresholds where defined by the management, as a baseline, and can be easily adjustable depending on how stringent and rigorous they want the evaluation to be.

	Criteria	Weight
	Status (Live or Project)	13.14%
Gate 1	Commercial Tier	26.23%
Basic Insights	Opportunity Size	51.47%
	Complexity	9.17%
	Trends	27.42%
	Market Trends	16.19%
Gate 2 Strategic Fit	Competitors' Offer	27.42%
	Corporate Strategy	7.11%
	Operations Strategy	9.11%
	Platform Operations Strategy	12.74%
	Risks	15.76%
Cata 2	Backlog	10.81%
Ducinose Development	Internal Projects	13.15%
Business Development	Roadmap of Product team	28.97%
	Roadmap of Platform Operations team	31.32%
Cata 4	Δ Margin Health	49.91%
Gale 4	Δ Order Contribution	40.11%
Portiono Evaluation	Timeline	9.98%

Table 4.4: Relative priorities of the criteria used at each gate

4.4 **Business Case Template**

As part of the last evaluation gate, a financial analysis on the new feature has to be done. In this case, it was important to develop a template for that calculation in order to incorporate information from multiple sources while ensuring the easiness of using the tool. As it has to be a purely numerical business case of a feature yet to be developed and implemented, some estimations will need to be done. Therefore the result of the business case serves only as a proxy of the expected profitability of the feature.

The business case template was structure similarly to the way a Profit and Loss statement (P&L) is organized. Three main categories are used to measure the impact of the new feature: Revenue, Cost of Sales and Selling, General & Administrative Expense (SG&A). This structure is presented in Figure 4.3.



Figure 4.3: Profit and Loss structure

This structure facilitates the retrieval of information from databases, which is registered using these same categories. Briefly summarizing each category, the first is related with the result of the the multiple sources of income (either direct or indirect), the second refers to inherent cost incurred in order for sales to happen and the last with general costs, not directly tied to the act of selling, but with operational costs necessary for the company to do business.

In order to estimate the impact of a new feature, the three different big categories were not sufficient to correctly perform the business case creation. This way, more precise estimations can be done, as the metric impacted could be directly adjusted without the need for extrapolation to the group as a whole.

As an example, the adoption of a new payment method that reduces the payment refusal rate in 1% cannot be extrapolated for a direct increase of the revenues on the same percentage. With the rest remaining unchanged, revenues will only increase on the proportion of that rubric. If refusal rate is associated with a percentage of lost GTV, the reduction of refusals will only impact the GTV associated with this driver.

As a result, different rubrics were considered based on different drivers, like it is shown in Figure 4.4.



Figure 4.4: Rubrics used on Cost of Sales and their drivers

Given the fact that there is the need for historical data in order to compare the impacts of the feature with the as-is, data of 2019 was collected from databases. However, as some features may be impactful on both the B2B and B2C services of Farfetch, that information had to be withdrawn for the marketplace and for every business client on the FPS side. Those reference values were compiled and interpreted for different situations.

The business case creation tool was also designed to measure the impact of a new feature on a prospect client: if a brand is demanding a feature in order to make the transition to FPS, the estimated costs could be indeed calculated given the current Gross Transaction Value of the brand on its website. The apportionment used is withdrawn from similar sized clients and the business case is filled without the need for manual calculation. The template built is presented in Figure 4.5.

Brand:			
If not an exis	sting client:		
Business Model GTV Estimation:			
	Initial Values	% of Variation	With new service
GTV			
GTV delivered			
GMV			
Net Sales			
Comission			
Revenue			
+ Other Income			
Cost of Sales			
+ Increase			
SG&A			
+ Setup Cost of Operations			
+ Ongoing Cost of Operations			
# months of ongoing costs until end of year			
Total for the year			
Profit			
Order Contribution (higher the better)			
Change:			
Margin Health (Cost/Comission) (lower the better)			
Change:			

Figure 4.5: Business case template

The development and posterior implementation of a new service requires hours spent by teams on that specific feature and for each brand that wants it implemented. These hours need to be considered as the time spent on one particular feature could instead be spent on other features or tasks. In fact, these can be splitted in three different strands:

- The development costs incurred just one time no matter the number of clients who will eventually use the feature;
- The setup costs of implementing a service on the operations and websites of the brands, proportional to the number of times it has to be replicated, including the capital expenditure;
- The ongoing costs needed to keep certain services active (operational expenditure), that require dedicated people, fees or licenses in order for the feature to remain working properly.

In order to estimate each cost described above, the previous features' development and implementation are again used. Moreover, minor adjustments can be done to ensure an estimation as accurate as possible. To do so, data that were registered on the services catalogue and on the tool used for time management called Clockify was used. This is, however, a recently used tool meaning that the number of features developed whilst using it is still small.

In terms of the development times, the best metric of comparison is the complexity of the feature. With the data extracted from Clockify, some entries had to be cleaned as there were plenty of outliers (mostly due to the fact that the tool was new to everyone using it and no standardized way to input information was spread amongst the users). After that, it was possible to have the

average time spent on the development of each feature. Those values were grouped by the features' complexity, resulting in an estimation of the time spent designing a solution for past features classified with low, medium and high complexity. Based on the complexity defined at the time of the request by the specialist teams, time spent is estimated.

For the setup times, based on all the features previously activated and the teams involved, the average time spent on the setup was calculated for features grouped by impacted workstream. This way, it was possible to group and compare a new feature to a similar one, in the same area, with the need for the same teams to be involved. These were average times that did not consider the complexity of the features, as that information of development complexity was not available on the catalogue. However, in a way to make the time estimation as real as possible, the average values were adjusted based on a complexity weight to ensure complexity was another factor included in the evaluation.

Based on the total number of hours and on the different hourly rates for each job title, it was possible to calculate how much was going to cost each task force to be used.

For the ongoing costs, those values were not yet catalogued at the time this work was conducted, but the business case template was prepared incorporate this information once available.

Once all costs are considered it is possible to proceed to the evaluation itself. The key metrics to be calculated and to be used as a way to address the relevance of the feature are the Order Contribution Margin and the Margin Health.

The first, as the name suggests, indicates the percentage of an order that is actually incorporated by the company as revenue. This is not exactly the same as the commission held by Farfetch as that margin has to be deducted from some of the operations costs. In fact, the revenue obtained by the charged commission to the client is deducted of all variable costs (both the COS and SG&A) indicating, percentage wise, how much gross profit is obtained through the sales, calculated as shown in Equation 4.1:

$$Contribution Margin = 1 - \frac{Total Costs}{Total Revenues}$$
(4.1)

Revenues, are the sum of all the revenue drivers

Total Variable Costs, are the sum of the cost of sales and the SG&A costs attributed to a brand based on the number of sales

The second, Margin Health, is calculated with the sum of all costs attributed to one brand divided by the revenue generated by commission, given by Equation 4.2. Even though quite similar to the contribution margin, what it represents is how much of the margin is used to cover up the costs Farfetch has with that brand, with lower values representing a healthier margin.

$$Margin Health = \frac{Total Variable Costs}{Comission}$$
(4.2)

Total Variable Costs, are the sum of the cost of sales and the SG&A costs attributed to a brand based on the number of sales

Comission, is the total revenue obtained by charging comission on the orders processed

The use of two different metrics is useful given that comission is not the only revenue driver. Therefore, even minor adjustments on some of the other drivers may impact the contribution margin and not the margin health.

As the calculation was automated in the self servicing tool, once the user added the estimated increase in costs as well as the expected variation in the revenue, those values were automatically displayed and compared with the reference values.

Regarding the time horizon for when this evaluation is performed, in order to ease the approximation and not incorporate another source of variability, discounted cash flows were not included in the analysis. Considering the duration of the brands' contracts, the analysis is done just for one year, leaving out the need to consider inflation and wage updates. *Ceteris paribus*, what is evaluated are just the ongoing costs related with the number of months that feature is live for each specific brand.

4.5 Implementation Stages

Considering the limited timeline of this project, certain aspects of the process had to be favoured over others. This is what justifies the consideration of three different and consecutive stages to be used on the implementation of this feature evaluation. The first thing to be done was developing the framework to aid feature evaluation by homogenizing the way that assessment is done. However, in the long term, the goal of the team is to automate the evaluation for basic and relatively simple requests. This way, focus can be shifted to bigger features that require more complex business cases. These have higher competitive and financial gains but proportional unpredictability.

Despite the fact that the present work focus mainly on the adoption of the framework as a way to tackle problems occurring on a daily basis, improvements and optimization can be done after routines are created, validated and used by everyone.

4.5.1 Growth

Farfetch Platform Solutions is a relatively new business unit of the company. Currently it is in the expansion phase, meaning that in order to gain market share and strength, it needs to cope with most of the clients' current requests. The use of the framework will be vital in the near future to optimize that evaluation.

The problems identified during the interview phase are the ones requiring immediate response before implementing any other improvement tool. Given the multiple channels of communication and touch points with the clients, a centralized communication flow was defined. The delivery manager (person entitled to align the multiple functional teams and coordinate their work to meet the expected delivery date) should be the one responsible to funnel the requests that may come throughout each area. Consequently, it should be possible to keep a trace of every new request, no matter the channel, creating full visibility to all teams of the requests being received. In addition, teams should not sign contractual delivery dates without the validation of the delivery manager on every team, preventing unrealistic expectations to the client. The teams should provide estimates of how much time they needed and at which part of the development they needed to intervene.

Secondly, despite the perception there was of the Product team's entitlement as the main stakeholder, no team alone should give the approval to a client's request. The solution should be the creation of a committee for shared evaluation. As many features involve cross-functional teams, the impacts also affect multiple teams. This happens as some teams are responsible for ensuring KPIs are kept on target, that may be affected by the implementation of new features. Therefore, the decision and date agreement with the client should not be done without everyone involved validating those requests.

A committee consisting of all directly impacted teams (Commercial, Product, Operations, Technology, Production and a few more) should be conducted once a month to create transparency. Each team should give its opinion on how important that feature is considered to be. Ultimately, the decision to move forward with the development should be done with everyone's consent, with deadlines agreed between all and with total visibility of which requests were discarded and why.

The framework serves the purpose of helping the Platform Operations team to give its feedback to the committee for each feature request in particular. In fact, it will be used as an assessment tool to improve accuracy of the team's judgment.

4.5.2 Stabilization

Once the main issues are addressed and routines start to exist, it is possible to start automating the process. As more features get evaluated over time, teams start developing a sensibility to what are requests may be relevant to address. These will have a deeper evaluation, heavily based on proofs of concept and business cases.

In order to have a global estimation of the costs involved in each feature's development, the other teams should also create a service catalogue similar to the one Farfetch Platform Operations has. As a result, if every team had a record of all services, how much they cost to implement and what is the increase in profitability it is possible to understand which requests are more prompt to create economic value for the company. A tranversal services catalogue created by all teams related should be created, allowing the commercial team the entitlement to accept or decline simple requests autonomously from the evaluation committee.

Given the time spent between the initial stage and this one, since some feature requests will have been rejected in the meantime, it is important to keep a record of that information. The strategy lines that may have been the reason for rejecting that request probably won't be the same if that backlog is revisited yearly. The fast-paced consumer market may change the criteria once used to assess if a feature should go forward or not. Ultimately past requests may be approved if the change in momentum justifies it.

4.5.3 Innovation

As the industry life cycle of luxury e-commerce is entering a high maturity level, there are only a few brands that still have no sort of online presence. In order to make clients switch from one e-commerce platform to another, truly innovative features and services need to exist.

When all new feature requests start being addressed with a high level of automation it becomes possible to truly focus on innovation. The goal is to foresee client needs even before they feel the need to ask for new specific features, anticipating clients' needs. Strategic planning will guide features' development by promoting the creation of internal projects that foment creativity. For that reason, it is important to create a common strategic goal transversal to all teams, in order to jointly define guidelines and opportunities.

By turning ideas into projects, features can be developed so that time to market is shorter than what competitors can offer. This can happen by offering specific clients the opportunity to be part of the pilot phase of a feature development project. The single ownership of services increases the value proposition of Farfetch, surpassing its competitors at least until those services are replicated. In fact, that momentary competitive advantage may be enough to capture market share in an already mature industry.

New Portfolio Management Framework

Chapter 5

Framework Validation

In order to assess the performance of the framework, two tests were carried out using two different feature requests. The features chosen by the team to be evaluated were Pre-Orders and Non Free Returns.

After the description of each feature, the evaluation process will be described throughout the different gates of evaluation as well as the explanation of the final outcome: approval or denial.

For privacy concerns, the results will only be presented in percentage of variation, in order to reduce the amount of financial data disclosed.

5.1 Pre-Orders

5.1.1 Feature Description

Pre-orders was a feature designed and developed in 2018 when there was no structured evaluation done to assess the relevance of the feature. It was requested by a rigorous client that sought to antecipate the demand of its collections right after the fashion shows and even before those items were ready to be sold and shipped. Additionally, the volume of full priced items sold was expected to increase given the pre-commitment of many clients even before waiting to see the clothing piece. The feature was then implemented.

When developed, the feature was already available on a number of direct competitors meaning that a direct request from a client established the need to have it available as well. What was not evaluated was its difficulty in terms of technical developments and legal changes. On one hand, it involved a high number of teams, therefore requiring their approval, an estimation of effort and budget and a due date for the project. Nevertheless, everything was done without a clear understanding of the impacts on revenue. On the other hand, the full document of terms and conditions had to be revisited since the payment provider would collect the money without an order assigned to the payment.

Once fully developed and ready to be implemented on the brand, the client no longer wanted it incorporated on its operations due to technical difficulties. The feature required back office integrations that the brand was not receptive in doing. Despite this, as the service was available to be used by any client, Farfetch started marketing this feature to new prospect clients that eventually started using this feature. This fact suggests a poor evaluation at the time. Even though it probably made sense to have that feature as a service available, it was reckless to discard other ongoing projects at the time and solely focus on the development of this feature for a client that was not even aware of the complexity increase on its operations.

5.1.2 Evaluation Output

This feature was used to calibrate the framework as it is a feature already live.

Following the sequential gates, the feature was requested by a brand positioned at the third tier of commercial value, out of five. This request came once the client already had its website live and with its operations ongoing. Records show how insistent the brand was, as the same request had been asked a couple times before.

In terms of the key success metric used to support the request, the brand estimated a potential increase of its gross annual transaction value of about 1%. This would be mainly justified by the increased volume of sales at full price and by commitment of the buyer to move forward with the purchase. It is important to remember that the business model FPS has is mostly commission based, meaning that a percentage increase in sales translates into an increase in revenue of a smaller proportion.

At the time the specialist team considered the feature to be of a medium level of complexity and that there was viability for it's development, both in legal and technical terms.

As all the information was collected the initial gate of entry was passed and the process moves forward to the strategic fit evaluation at the second gate. Regarding the trends, the feature was related with one current trend seen on the market: the launch of exclusive collection items and pre-orders reservation as a way to guarantee the one item out of a very limited quantity available. The feature was already available at a number of direct competitors, namely Yoox Net-a-Porter. Concerning the internal strategy, the feature is aligned with one strategic pillar of the company related with the launch of exclusive products and is still a related with numerous key initiatives used to support the teams' strategy.

The result of the evaluation at the second gate was positive, meaning that it was above the estimated threshold for a feature like this to pass it.

Moving forward to the third stage, related with business development, the feature had already been asked at least once at the semester prior to it's approval and it does not increase any of the risks mapped. In terms of the roadmaps of the teams, at the time those were revised and pre-orders were included meaning that for true application purposes, the feature will be considered as being on the roadmap. As a result, the score obtained was well above the minimum one initial defined.

Finally, as the evaluation reaches the financial analysis, it was time to use the business case template in order to understand the consequences of the feature implementation.

Using the estimation of costs for operations, the feature's development and setup would have a combined investment around 1562.5\$, just including the time spent by the platform operations team working on the feature. Considering the reference financial values at the end of 2019, a 1%

increase in the GTV with the margin unchanged would lead to an increase in gross profit for that specific brand of about 2.34% just for the first year of the feature being made available.

The contribution margin would grow from 17.95% to 18.21% and the sum of total costs over comission would decrease from 70.39% to 69.88%, indicating an increase in the revenues by comission higher than the increment of total costs. This information is shown in Table 5.1 and the summary of the evaluation is presented in Table 5.2.

	Reference Values	New Feature
Order Contribution	17.95%	18.21%
Margin Health	70.39%	69.88%

Table 5.2: Summary table on the application of the framework to Pre-orders

	Gate 1	Gate 2	Gate 3	Gate 4
Gate Inputs	Live Client Commercial Tier - M 1% increase in GTV Medium Complexity	Aligned with 1 e-commerce trend Same feature offered by >1 competitor Not related with any market trend Aligned with 1 strategic pillar on corporate, operations and platform operations strategy	Similar feature on the roadmaps of Product and of Platform Operations for the year Does not pose any additional risks Not part of any internal project Feature asked at least once in the last semester	Margin Health: +1.14% Order Contribution: +0.73% Timeline: Capacity available for the project
Minimum Score	2	1	1	1
Obtained Score	2,74	1,66	2,129	1,32

Considering the fact that this feature is already live on the client, it is possible to cross check the initial estimation with the real change in sales. It is not possible to isolate this feature's impact on the results, but after one year of the feature's setup the financial results declined. The GTV in 2019 for this brand was 5.42% smaller than in 2018 while the GMV was only 1.47% smaller. This difference is justified due to the reduced number of cancellations from one year to another.

The results are not linear to the feature's implementation. Other factor were probably the reason for the decreased value of sales. Nonetheless, the results obtained with this feature suggest the importance of a critical analysis of the estimations provided by the client.

Given the fact that both indicators are positively affected, the decision to be taken, considering the framework designed, would be to move forward with the development. Therefore, even if no analysis were made at the time, considering the information available today, the decision that was taken was in line with the decision that would have been taken now.

5.2 Non Free Returns

5.2.1 Feature Description

With a different purpose than the other feature, this one is currently being assessed and will benefit of being one of the first to have a structured analysis check.

Farfetch has a free returns policies since the beginning of its operation. When it was purely a marketplace, it was not an issue for any partner besides Farfetch itself. However, when the company started offering B2B services, the same assumption was not valid anymore as the end brand would be the one entitled to pay for the shipping returns.

Almost all clients at a certain point requested this feature. Nevertheless, Farfetch had always been reluctant in changing its approach to returns: free returns surge up the shipping costs. However, clients feel safer making a purchase knowing that it is easy and free to return the products if they are not what they expect them to be. In any case, the decision not to move forward with the design of a solution for non free returns was always based on the premise of the market not moving towards that approach. Numerous brands, however, mainly due to sustainability concerns, keep pressuring for that feature to be available.

Besides the technical concerns related with automated payment and fraud processing, it is not feasible to design only one solution as requirements are not the same for all countries. Some countries do require a mandatory free return period for online purchases and, only after that period, could this feature be used by the brands.

5.2.2 Evaluation Output

When collecting the basic information needed for the analysis, this was done as an internal request, made by an internal team, based on the meetings with a foreseeable client. Due to the lack of information regarding total sales, it was aligned with the team that a generic client would be used. This client should be estimated based on the average sales of those of the medium commercial tier.

In terms of the key success metric to be used, the requesting team recognized order contribution as the most compelling one, mainly due to the fact that the impact is not clear, as it affects two different sides. On one side, shipping costs are decreased but on the other side total GTV decreases as clients are less confident to make purchases. The technical complexity is high given that the systems' capabilities do not support this option and the fact that a solution for managing returns payments would need to be designed. Legal viability also exists at a certain extent, given the different countries' regulation for returns.

Once all the basic insights were gathered, the evaluation itself could start. By cross-checking this feature with the trends report, it became clear that the market was not moving towards paid shipping. However, some competitors still offer this same approach to returns. At the same time, this feature does go in line with one corporate strategic pillar for the year related with the reduction of the returns rate and associated shipping cost. With a combined numerical score above the minimum threshold, the feature passed to the next gate.

As the feature does not go along the envisioned idea of the future for the company, not even a similar feature is on the teams' roadmap. Some risks arise namely because of the new type of payments not directly associated with one order shipped to the customer but associated with a return to the brand. Nonetheless, it is a feature that was asked numerous times by many clients and even a deciding factor on multiple unsuccessful contracts. This combination of disparaties resulted on a score just merely above the threshold. However, the business case in an unclear situation similar to this one should be done in order to reduce unbalanced decisions, at least when there is available capacity to do them.

Since the business case is not constructed for any existent brand, the approach has to be made in generic conditions. The business case template is prepared for situations like this. What it does is estimating the reference values based on the average homonymous values of the existing brands.

Even though projections are difficult to make, the team estimated a decrease in sales (GTV) of about 15% and a decrease in the value of returned items of about 10%. In addition, the cost of sales for Farfetch would not be affected as the brand is the one entitled to pay the shipping cost.

Considering all these inputs, the result was a lower gross profit, lower order contribution and worse margin health as shown on the values in Table 5.3. The application of the framework to the feature is summarized in Table 5.4

Table 5.3:	KPI	change	for an	average	brand	after	the	feature	implen	nentation

	Reference Values	New Feature
Order Contribution	29.82%	27.36%
Margin Health	54.12%	55.87%

	Gate 1	Gate 2	Gate 3	Gate 4
Gate Inputs	Prospect Client Commercial Tier - M 10% decrease in returns High Complexity	Not aligned with any e-commerce trend Same feature offered by >1 competitor Related with 1 market trend Not aligned with any strategic pillar on corporate, operations and platform operations strategy	Similar feature on the roadmaps of Product and of Platform Operations for the year Affects 1 risk of low probability Internally analysed before Feature asked by all clients	Margin Health: -6.57% Order Contribution: -3.13% Timeline: Impossible before the live date
Minimum Score	2	1	1	1
Obtained Score	2.10	1.26	1.06	-4.04

Table 5.4: Summary table on the application of the framework to Non Free Returns

As the order contribution which was the KPI to be used as a criteria for decision decreased 2.46 percentage points, the business case is not favourable for this feature in particular. The reduction in the return rate was not sufficient to supplant the reduction in sales.

5.3 **Result's Limitations**

As both features were evaluated using the framework and the business case template, it is important to recognize some limitations in the evaluation process.

Firstly, for simplicity reasons, it was decided that the net present value would not be used as it involves discounting future earnings that are hard to predict. These are heavily dependent on the number of brands who will eventually adopt the feature and the estimated growth in sales for them. Too many assumptions would need to be made in order to make this cash flow adjustment, justifying why it was decided to make the calculation just for one full year of implementation.

Secondly, the business case template was designed to evaluate individual features or services for the brand that specifically requests them. Consequently, a feature is analysed considering the business case for one specific client without considering how scalable that feature is for other brands. In fact, a decision might be taken with the false premise of unprofitability. However, if the feature were to be made available to more than one client, the business case and the decision would not be the same.

Nonetheless, these limitations reduce the complexity of the framework and therefore increase its adoption speed. There is an inherent trade off between complexity and accuracy of the framework, but it was chosen to balance the situation this way. Future adjustments may occur after the framework is settled.

Chapter 6

Conclusion

6.1 **Project Conclusions**

A company positioned on a fast changing business industry as the e-commerce sector needs to be agile and carefully consider every new movement as some decisions may create competitive disadvantage. The goal of this project was structuring the evaluation process of the new features requests by clients on a B2B e-commerce platform provider.

In order to facilitate the decision making process, a framework was designed and created as a way to homogenize the evaluation process of the requests. Planning the approach with the main stakeholders was crucial, yet iterative. The main problem were mapped and a framework was developed. Its aim is analyzing the strategic relevance, framing in the business and financial metrics of any new service that could be requested. Considering all the needed input, all the information needed for the evaluation was collected and compiled. The idea was to capacitate any user of tool with the correct and most recent information.

The chosen tools to be used, both the analytic hierarchy process and the stage-gate innovation model, proved to be intuitive ways to model the problem on a rather qualitative and complex decision making process. Moreover, the key information was gathered and market assessment reports were done and included on the framework, ensuring all the necessary inputs to apply the framework. However, keeping in mind the pace of change on e-commerce and more specifically in luxury fashion, the lifetime of the reports will start diminishing after a period of six months starting at the time they were done.

The tests that were conducted to assess how the framework would behave against real life requests. They provided that it is concise and responds well to different request types. Ultimately, the evaluation of the new services was similar to the result the most experienced stakeholders already felt as the most beneficial for the company. This structured approach, complemented by an overview of the routine on which it would be integrated, completely discard the need for *ad-hoc* evaluations.

The two specific feature requests that were tested, pre-orders and non free returns, had results that were rather expected. If the expected decision of stakeholder and the result of the evaluation

were antagonic, something would probably be wrong. Therefore, this framework serves as a way to process the formerly unplanned approach, and increase it's accuracy using financial data to support it. For these two services in particular, the first was used for calibration meaning that the result would not compromise the future development. However, for non free returns, the evaluation result was to not move forward as margins would be negatively impacted by the implementation of that feature.

The use of the framework was just part of the first implementation step. On a sequential time basis, two following plans were also presented to be be used once this new approach is correctly implemented on Farfetch's routines. The Stabilization and Innovation steps are the next steps to follow. The framework sustains the basis on which new forms of automatisms are created. During the time when this work was conducted, the team foresaw the applicability of this framework not only to new feature requests but also to existing services. By evaluating the financial results of each existing feature using the provided template for business cases, it becomes possible to understand which services should be offered to other clients that would ultimately increase the sales and revenue of the company.

Summing up, the present work sets the precedent for a structured way to strategically assess which services and features should be approved for development. In order to increase the value proposition of the present work for the company as a whole, it is fundamental to extent this sort of strategic vision to all business areas and integrate the designed routine at a larger scale. Some of the organizational changes proposed could be used as a starting point for the integration of all teams on issues transversely acknowledged by all.

6.2 Future Work

Given the time length that was available for the project design and execution, this framework is only the beginning of a new process.

Considering the amount of requests that eventually will reach the company in the future, there may be the need for some sort of automated evaluation. As the framework is currently heavily reliant on user input information, it may be justifiable on the future to add any sort of automated evaluation on top of the present framework.

The framework was developed to use the information available, however was structured to take into account data to be release on a near future. As stated before, the ongoing costs of operating certain services are not yet available to be used as an input for the business case. Nonetheless, the tool already has the necessary structure to be include that information once it it available. In the future, only minor changes will need to be done in order to include this new information for a more accuracy and complete financial evaluation.

The framework was designed not to be static but to change according to the needs of the stakeholders and the market conditions. All the necessary inputs need to be upgraded regularly according to the lifetime of each type of information. There is the need for recurrent maintenance

6.2 Future Work

of the framework in order to guarantee that its performance is as close as possible to the one once it was designed.

Given the fact that the decision making process will optimize the use of resources and capacity of teams, a new set of future actions could benefit from this. Truly innovative projects can be done on a higher regular basis with the left remaining capacity. The commercial approach from Farfetch to the clients can also change as decisions can now be justified based on strategic fit and estimated financial results.

To sum up, the Platform Operations decision-makers are now empowered with data-driven insights, prompting proactive actions and encouraging continuous improvement. By creating structure on an area with non existing processes, a transparent communication flow may now be established between Farfetch teams and clients. Effective evaluation means focus could be redirected to plenty of other truly value capturing projects.

Conclusion

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Appendix A

Interview Results

The conducted interviews were the first step used in methodology to assess the most common problems before the implementation of the framework.

The results obtained (the pros, cons and chances for improvement) are summarized in Table A.1.

People - Which teams have impact on the go/no go decision? Is there a clear stake-holder in the decision making?	People - Which teams from the organization are involved in the new feature request? And which responsibilities each team has?	Tools - Which are the tools used to support the process? Any systems used to create the process, organize the flow?	Process - Can you describe the flow?	Process - How do you receive those requests? What is the channel?	Organization - How do you organize the work within the several teams?	Organization - What is current approach when clients ask for a particular feature not yet de- veloped and not in the catalog?	How would you classify the previous feature development if looking from the current per- spective? As-Is - Getting into detail	How many of requests are denied, percentage wise, and why? Does it happen to have features that had a no- go and are request by another clients later?	Overview - General sense of the process How many new features are requested per year?
Everyone considers there is a main stake- holder, the product team	It is a team effort that involves many teams	Nothing to highlight	The path is more or less defined to everyone	With more communication channels, the client feels free to present the request to who it has a better relationship	Most teams have a roadmap for what are project to develop	All teams perform sort of an evaluation on the expected value/return for that feature request	At the beginning made sense to go with brand's requests, but is changing for a more structured approach	The ones that lack strategic alignment are dis- carded right away There is a backlog for most entrance channels	Pros Nothing to highlight
Product should not be entitled to decide alone things that will impact other teams	The responsibilities are not correctly defined. Not everyone thinks they are entitled to do what others believe in	Lack of tool to help the process and the flow of information	Usually product is entitled to organize the work with all the teams that need to be involved	Information gets lost within the company since each team handles directly the requests that come to them	No other teams are informed if there are changes	That evaluation is not common to everyone (what's good for one team may not be for the others)	Some clients still feel entitled to demand what was once always accepted	Not every team is informed of all the requests that exist Features that were denied are not address fur- ther in time	Cons Lack of clarity on the volume of requests
Get a broader decision-making with every stakeholder involved	Align every team on their specific role in the decision making	Define common tool to be used	Every team should get a sense of what is hap- pening, since they better than everyone else know if that request involves them directly	Either only one entry channel or a pool where each needed to place the requests received	Better transparency along all teams' roadmaps	Bring every stakeholder to the decision- making process	Evaluate those requests with a more holistic approach (tier, market, cost, effort, strategy)	Shared evaluation of the requests Revisiting backlog once a year/semester	Improvement Opportunities Keeping a record of the amount of requests

Table A.1: Compilation of answers obtained during the initial interviews
Appendix B

Information Flow Model

Given the fact that the framework is not static, it is important to understand the flow of information and the needed recurrence of the necessary updates.

In Figure B.1 shown below, the information flow model is presented. The owner of the input, the frequency of the information hierarchy are presented.



Figure B.1: Information Flow Model of the Framework